INTERNATIONAL CONTROL OF RAW MATERIALS

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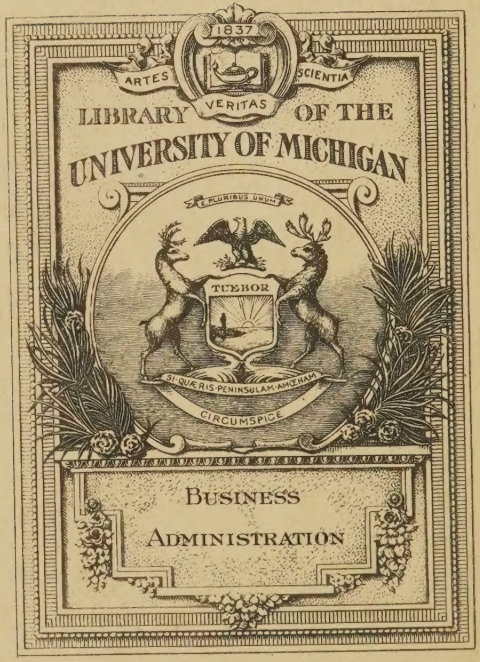
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INTERNATIONAL CONTROL OF RAW MATERIALS

BY
BENJAMIN BRUCE WALLACE
AND
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WASHINGTON, D. C.
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DIRECTOR'S PREFACE

Commercial and industrial developments following the World War have focused public attention with unusual sharpness upon questions of access to raw materials, production of which is localized in a particular country but for which the consumer demand is widespread. The resulting opposition between nationalistic interest and international comity has been at times acute and appears destined to be permanent in character. In presenting a study in this field, it is the hope of the Institute of Economics that, through objective consideration of the issues involved, something may be accomplished toward promoting a spirit of co-operation between nations in devising an established machinery for dealing with the problem.

We have selected this particular phase of commercial policy for discussion not alone because of its recent prominence but also because there appears to be more possibility of securing early international agreement on some means of coping with it than is the case with most other issues in this field. There has been no assumption on our part that restrictions on exports of raw materials are either more or less justifiable than the import tariff system to which we ourselves are committed. They are, however, much less widespread in practice. There is a less firmly entrenched vested interest, and hence

more apparent promise that tangible results can be secured from efforts to curb them. We have sought to approach the whole matter without prejudgment as to the "rightness" or "wrongness" of given practices, but simply with a desire to see clearly the purposes which have animated them, the methods followed, and the results obtained. We believe such an approach is most likely to furnish a firm foundation upon which to build in securing agreement not only upon the principles involved but upon the machinery that would be most effective in limiting such restraints of international trade.

In undertaking this study, we first turned to Dr. Benjamin B. Wallace, who had long been a student of the general field of international commercial policy and had given particular attention to the raw materials controversy. Dr. Wallace secured a year's leave of absence from the United States Tariff Commission, with which he was serving as Chief of the Foreign Relations Division. In spite of indefatigable labor on the part of Dr. Wallace, with the aid of Maurice G. Smith, this time did not prove sufficient to complete the study in a form acceptable for publication. On many phases of the problem also there was divergence of view among members of the Institute. It was accordingly decided to turn the study over to another member of our staff, Lynn R. Edminster, who also had had special training and experience in this field.

Inasmuch as it was not possible for the latter to free himself at once from other lines of work on which he was engaged and to devote attention exclu-

sively to this study, considerable time has been consumed in completing the manuscript, and many phases of the situation have changed since the original investigations were made by Mr. Wallace. Hence it was necessary to undertake much additional research; and in the light of this further work and of careful reconsideration of the whole matter by Mr. Edminster and the collaborating committee from our staff, the manuscript has been almost completely rewritten.

The book is therefore issued under the joint authorship of Mr. Wallace and Mr. Edminster; but it must be understood that the former is not to be held in any way responsible for the conclusions expressed. Mr. Wallace has been engaged on work along other lines in the Orient for more than a year past, and it was thus impossible for him to collaborate actively in the preparation of the final manuscript. The interpretation of facts, conclusions reached, and recommendations made have been prepared by Mr. Edminster in conference with a collaborating committee consisting of Thomas Walker Page, Charles O. Hardy, Philip G. Wright, and the Director of the Institute of Economics.

EDWIN G. NOURSE,
Director.

Institute of Economics,
May, 1930.

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Within the Institute the authors had the valuable assistance of the collaborating committee appointed to aid in the preparation of the manuscript, consisting of Thomas Walker Page, Charles O. Hardy, and Philip G. Wright; and also

of Mr. Leo Pasvolsky. During various phases of its preparation, important contributions were made to the manuscript itself: by Mr. Wright, in Chapters V and VI and also Appendix B; by Mr. Page and Mr. Pasvolsky, in Chapters X, XI, and XII.

LYNN RAMSAY EDMINSTER.

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INTERNATIONAL CONTROL OF RAW MATERIALS

CHAPTER I

THE NATURE OF THE PROBLEM

Among those aspects of international commercial policy which have been most widely discussed in recent years is that which has to do with government control of exports of industrial raw materials and foodstuffs. Governments have not, of course, sought restriction of exports as an end in itself. But in the hope of realizing certain other objectives they have been impelled more and more to resort to policies and practices that have had the effect of limiting exports by making more stringent the terms on which they could be procured. Especially strong has been the temptation to resort to such restrictions in respect to products of which a particular country has possessed, if not a national monopoly, at any rate advantages in production sufficient to give it many of the elements of a monopolistic position.

This particular type of restrictive policy is by no means new. Quite the contrary. It is a revival of one that is as old as Mercantilism itself. In the heyday of Mercantilism it was in common use. During the past century, however, it has been largely overshadowed by other types of trade control and trade policy. In modern times the commercial policy of nations has expressed itself principally in the

restriction of imports and the encouragement of exports. Rare, indeed, has been the special encouragement of imports by the state. And exceptional rather than common has been the application of highly restrictive policies to the export of industrial raw materials and foodstuffs. It is only in recent years that this last-mentioned type of control—the one with which we are concerned in this book—has shown signs of general revival. Only within the past decade or two has it given rise to widespread apprehension.

Evidence of this growing public anxiety is abundant. Hindrances to the free movement of raw materials in international trade have played a particularly important part in the post-war discussion of trade barriers; and the encouragement of such restrictions by governments has in turn held a prominent place in the discussion of the raw materials problem. In the United States, although there had been earlier foreign restrictions in respect to other imported products such as potash and coffee, it was the British restriction of crude rubber that for the first time thoroughly aroused public opinion. The spectacular rise in the price of crude rubber in 1924 and 1925, following the adoption by the British of the so-called Stevenson Plan for the restriction of rubber exports from British Malaya, undoubtedly served as no previous experience had done to direct public attention to the whole problem of government control of trade in raw materials.

In other consuming countries there has been a similar growth of sentiment. The very persistence

with which the subject has forced its way into international discussions and conferences is but a reflection of this fact. One after the other international conferences and agencies concerned with the general problem of trade barriers have been compelled to pay particular heed to this phase of the subject. In the proceedings and activities of the International Chamber of Commerce, of the League of Nations, and of the World Economic Conference it has played a particularly important part; and even at international labor gatherings it has forced its way into the discussion because of its alleged bearing on industrial employment.

In attempting to deal with the problem various consuming countries have endeavored to meet the difficulty by individual national action. In a later chapter we shall describe the measures that have been, and those that might be, taken by the United States, acting alone. As the largest consumer of nearly all the products subjected to control, the United States has, of course, a vital interest in the matter; and for that reason much of the later discussion will hinge upon her position and attitude. But it is clear in the premises that the problem is essentially international. A country that exploits to the full its monopolistic position in respect to a particular product and does so in disregard of the consequences to the industries and peoples of countries that are dependent upon imports of that product, is of course acting wholly within the principle of national sovereignty. But if consuming

countries see fit to retaliate and economic warfare sets in, they too are acting under that principle. The difficulty is that the principle itself is inadequate to the needs of the situation. It is inherent in the very nature of the problem that any genuine and permanent advancement toward its solution must come through international action.

Especially is the search for a solution important from the standpoint of international relations and world peace. Whatever may have been their actual economic effects, there is no doubt that the restrictions thus far imposed have been a growing source of international friction and ill will. Public opinion, both in the United States and in other consuming countries, has regarded them not only as predatory and unjust in method and purpose, but as highly injurious in their actual results. So long as they are popularly so regarded they are—quite irrespective of their actual, demonstrable results—a constant invitation to economic retaliation and international discord. For the promotion of international good-will it is therefore of vital importance to ascertain whether there has been popular exaggeration of the evils imputed to them. Indeed, it is only through dispassionate study and clear understanding of the objects and consequences of their application that there can be any hope at all of meeting the challenge they present to economic and political statesmanship.

It is accordingly the purpose of this book to examine and appraise the results of certain typical instances of control of exports of raw products; to

indicate, in the light of the facts adduced, the basic issues involved; and finally, to suggest ways and means of advancing their solution.

I. THE EMERGENCE OF THE PROBLEM

Before entering upon the discussion of specific cases of control, it is important to examine more fully the conditions that have led to the revival of the practice, the extent of its growth, its characteristics, objects, and forms. Why has there been this revival of an old and largely abandoned device of Mercantilism? How general has been its extension? What particular objects of government has it been intended to subserve? And what are the forms that it has assumed? Let us first examine the conditions that have encouraged its revival.

Modern industrial nations are increasingly dependent upon foreign sources of supply for certain raw products. Though many raw materials are widely distributed throughout the world, many also are highly localized; and even those that are not localized are not distributed precisely in accordance with the relative needs of individual countries. Increasingly has this latter condition been true as the industrial life of each country has become more diversified. Diversified industrial activity makes it important for a country to have access to nearly every type of material. The vast increase in quantity and variety of materials essential for the modern industrial nation has made quite impossible anything like national self-sufficiency with respect to all raw materials. Even the United

States, despite the great variety of her natural resources, is dependent upon foreign sources of supply for some of the most important materials. For such products as silk, jute, sisal, wool, tropical foodstuffs of various sorts, rubber, tin, platinum, nickel, antimony, asbestos, manganese, chromite, vanadium, tungsten, magnesite, quicksilver, potash, and nitrate—to give but a partial list—she is dependent either partly or wholly upon imported supplies.

The World War brought this economic interdependence of nations into clear relief. During the four years of actual hostilities the whole world experienced, in varying degrees, an acute scarcity of raw materials and foodstuffs. This scarcity was in the main the result of the disruption of what had become before the War the normal system of distribution of these commodities through the channels of international trade. Drastic measures were taken by the governments of belligerent as well as neutral countries in respect to the allocation of essential raw materials and foodstuffs, and the effects of these measures were widely and acutely felt. Nor did activities cease there. As an instrument of economic warfare against their adversaries plans were laid by both groups of belligerents for the continuation of a measure of collective control over the distribution of raw materials even after the cessation of hostilities.[1]

[1] Ample evidence of these plans is found in the discussions on the subject of *Mitteleuropa* in the Central Empires and in the resolutions of the Inter-Allied Economic Conference held in Paris in the summer of 1916.

During the period immediately following the War, the emergency war measures largely disappeared, and the plans for post-war regional controls went into the discard. But new restrictions sprang up and became intensified with the growth of economic nationalism. Far from returning even to the degree of freedom of access to raw materials which had existed before the War, the world was confronted with new obstacles to an unhampered distribution of these essential commodities. Economic interdependence found but little expression in the post-war commercial policies of most countries. Yet the very intensity with which the opposite policy of economic nationalism was applied has served only to emphasize increasingly the fact of interdependence and the common interests to be subserved by its greater recognition in the commercial policies of nations.

The increasing dependence of industrial nations upon imports of raw products has tended to encourage the extension of export controls. Every country having a monopoly or a quasi-monopoly of a particular material has had an added incentive to exploit the advantages of its position; and in an era characterized by ever-increasing organization and control of economic activities there has naturally been a growing disposition to regard such exploitation as both legitimate and feasible.

The very nature of world economic organization has been a favoring circumstance. On the one hand are those countries with diversified industries, countries that have abundant supplies of labor, capital,

and managerial capacity, but which lack many essential raw products. For them easy access to the products supplied by other countries is indispensable to the continuance of many of their industries and the feeding of their populations. On the other hand are the non-industrial countries that have ample supplies of certain materials, but which do not have resources for converting them into finished products and thus achieving greater diversification; or countries such as Brazil which specialize more or less in the production of a commodity, like coffee, that undergoes no extensive industrial process. To such countries the application of export restrictions designed to make possible the utmost return from the exploitation of the peculiar resources with which Nature has endowed them has seemed, in a society of competing nations, a legitimate exercise of national sovereignty.

To assume, however, that the line of cleavage is strictly between industrial and non-industrial countries would be inaccurate. Some of the most important restrictions, for example that on potash, have been imposed by industrial countries themselves; others, such as that on rubber, have been applied in a colony with the backing of the home government. In either case it is clear that even industrial countries have not always been deterred by their dependence on imports of raw materials from themselves applying controls when it has seemed advantageous to do so.

Governments have played an increasingly important part in the exercise of these controls. Except

for a few instances, in which production and marketing of a particular raw material are entirely in the hands of a government, the commodities subjected to such restriction are produced and sold by private enterprise. Yet the effectiveness of monopolistic control has in all cases depended very largely upon the measure of government support. In the earlier monopolies, such as the potash, nitrate, and coffee combinations, there has been a steady development toward complete and continuous government control. As regards the more recent ones, such as the controls of sisal, silk, rubber, and Egyptian cotton, government action has been involved from the beginning. Indeed, in the most recent cases, such action has been the entire support of the monopoly.

Government action has been an important factor, moreover, in bringing about international combinations for the control of raw materials. The traditional enmity of France and Germany has not prevented the organization of a Franco-German combination for the purpose of raising the price of potash. The British and Dutch combined in 1921 to raise the price of tin. The Spanish government (or its agent) has a price-fixing agreement with Italian producers of mercury. A recent agreement between the Chilean nitrate interests and European producers of synthetic nitrogen had both the support and the participation of the Chilean government. These are perhaps the leading instances thus far of

agreements actually effected between governments or in which one or more governments were immediately involved. It is known, however, that attempts are being made in other fields, for instance, in respect to asbestos, cocoa, coffee, rubber, and sugar.

There is, of course, no sharp line between these government controls and private controls. Free access to raw materials may be limited by combinations of producers without the direct intervention of government. But in the main the private combinations are confined to the production and marketing of semi-manufactured or manufactured products, as in the case of the Franco-German steel cartel. Such an agreement may be consummated under permissive legislation, or at least without government opposition; but the home governments are not actually parties to the agreement and may not even lend their active support to the negotiations leading to it. Quite different, however, is apt to be the case in regard to raw materials, especially agricultural raw materials; for then the number of producers is usually large, and the intervention of the government is necessary in order to secure adequate organization and regulation for successful control. The degree of intervention in the case of raw products has in fact varied widely, as we shall presently show. But it has usually been present in some measure; and in the instances that we shall discuss in succeeding chapters it has been present in marked degree. For it is with government rather than private controls that this book is chiefly concerned.

II. THE GROWTH AND POSSIBLE SCOPE OF CONTROL

Such, then, have been the fundamental conditions tending to encourage the revival and extension of restrictive measures in the export of raw materials and foodstuffs. What, now, has been the extent of the growth of these measures and what are the possibilities for their further extension?

There has been a marked development of control since the turn of the century. The extent of the development cannot, however, be wholly indicated by a mere listing of the products to which control has been applied. For while the number has indeed increased, there has also been on the whole a distinct tightening of control in respect to both the earlier and the more recent ones; that is, governments have been increasingly active—their restrictive measures increasingly comprehensive. We give below a list of commodities now, or recently, subject to control.

Camphor (natural)	Potash
Cinchona bark (for quinine)	Pulpwood
Citrate of lime	Quebracho
Coffee	Rubber
Cotton (long staple)	Sandalwood oil
Currants	Silk
Kauri-gum	Sisal
Mercury	Sugar
Nitrate	Sulphur
Pearlshell	Tin

The list is based upon a chronology included as Appendix A of this book,[2] and the reader is referred thereto for more detailed information concerning dates of organization and reorganization, important

[2] Page 347.

revisions of controlling laws, and other noteworthy features of control.

The list includes twenty commodities. As explained more fully in Appendix A it does not include various instances where control is alleged to prevail but is actually left uncertain by the available evidence. Neither does it include certain instances, such as manila hemp, hides and skins, and palm kernels, where control, in the form of colonial discriminatory export duties, prevailed for a time but was eventually abandoned.[3] But it does include the similar case of tin which, however, still prevails. It also includes rubber, which, though restriction was abandoned in 1928, is too significant to be omitted; and for the same reason, Cuban sugar, controlled only from 1926 to 1928. Almost all of the cases listed have involved some degree of government participation or support. Two of them, cinchona bark and quebracho, apparently have not; but they are significant nevertheless in showing the trend toward control.

Of the commodities listed there are five over which control had taken definite form before the turn of the century; namely, nitrate, potash, camphor, currants, and mercury. In the cases of Chilean nitrate and German potash the beginnings of control run back to the seventies of the last century; but both have undergone marked changes in scope and character in recent years that will be

[3] Concerning these products, see Chap. VIII, pp. 239, 246.

brought out more fully elsewhere.[4] As regards mercury, also, there have been important developments in recent years; but the earlier Spanish control of this product runs back far into the past. Control of currants by the Greek government did not begin, however, until 1895; of Japanese camphor, until 1899. The other controls have occurred in more recent years.[5] Although two of them (those of rubber and sugar) are not now in existence, their recent application none the less attests to the growing tendency to experiment with such measures; and in so important a case as rubber, negotiations are pending which may lead to the early resumption of control.

In general, the trend has been toward increasing number of controls; increasing experimentation with the idea; increasing participation by governments in the operation of control (usually only intensified by the development of outside competition); and increasing scope of control measures extending, as we have seen, even beyond national boundaries.

Many products not now subject to restriction are within the range of possible control. It is sometimes assumed that the exploitation of a national monopoly cannot long continue and cannot, therefore, constitute a really serious problem except in respect to minerals. Minerals, it is pointed out, are

[4] See Chaps. II and IV.

[5] Some of the earlier Canadian restrictions on the export of logs run back into the last century; but the development of provincial embargoes on pulpwood has all come within the present century.

irreplaceable, their distribution unalterable. Not so as regards vegetable products. They are replaceable, and within certain broad limitations of climate and soil the industries that produce them can be transferred from one country to another.

The fact is, however, that many vegetable products are only slowly reproducible, and production of them is not always transferable. Forest products—building wood, cabinet wood, quebracho, and pulpwood—can be reproduced even in a favorable environment only in periods ranging from 30 to 100 years. Rubber, coffee, cocoa, and cloves require from five to ten years after planting to produce substantial crops. Many vegetable products have already found their best habitats. It is open to question whether, apart from the technical difficulties involved, most of these products can be developed outside the present areas in sufficient volume to affect materially the total world supply.

More valid in some ways than the distinction between mineral and vegetable products is that which can be drawn between materials of which stocks tend to accumulate and materials which are used but once. The distinction is important because those of which stocks do not accumulate can obviously be more readily subjected to monopolistic control. Each of these groups may contain either mineral or vegetable products. Thus, gold and iron tend to accumulate, whereas coal, oil, and mineral fertilizers are used only once. Similarly, reworked rubber and reworked wool are always important parts of the total stock, and paper is extensively

collected and remanufactured; whereas coffee and other foodstuffs are used but once.

Finally, it is to be noted that localization of mineral deposits and of products of vegetable growth within the confines of a single country becomes a less essential condition for successful control as the technique of control improves and as groups of countries combine in its application. The first controls attempted were for potash and nitrates, of which single countries produced virtually all the supply. But subsequent experience has revealed that, with proper technique, nothing like 100 per cent of the product need be controlled to make restriction effective. Indeed, control of half to two-thirds of the supply may at times suffice to make possible a considerable enhancement in prices, as we shall later show in the cases of coffee and rubber. And if that fails or is less effective than was hoped for, there always remains the possibility of international combination, of which examples have already been cited. Such combination can be employed not only to increase the effectiveness of existing controls by eliminating serious competition from other countries, but also to increase the number of products coming within the range of possible monopoly.

III. OBJECTS AND MODES OF CONTROL

In the main the restrictions thus far imposed have sought to achieve one or more of three objectives. Other purposes, for example the conservation of natural resources, have sometimes been alleged; but they have usually been, if genuine, only incidental.

One object of control has been the desire to obtain public revenue. The most common method of achieving this purpose has been through export taxes. Such taxes have not, of course, been confined to countries having a partial or a complete monopoly of a particular material. They have been employed more aggressively, however, when the country imposing them possessed such a monopoly, because under monopoly conditions the burden of the tax tends to fall upon the foreigner. The distinction is one that demands further emphasis.

Export duties levied by one country upon products that are exported by several countries are likely to fall mainly upon producers in the country which levies them. They cannot be used to fill the coffers of the taxing country at the expense of foreign countries, and they cannot therefore be regarded as predatory by such countries. Export duties of this sort have long been used extensively in countries that export chiefly raw materials. They are usually low, are borne chiefly by the producers, and are likely to pass out of use as fast as industrial and financial development of the country permits resort to other systems of taxation. Not so, however, with respect to such taxes when levied upon the product of a national monopoly, for then it is possible to pass along much more of the tax burden to foreign consumers. It is when associated with national monopolies, therefore, that export taxes present the problem with which we are concerned in this book. The Chilean nitrate industry furnishes a good illustration, of which more will be said later.

Another variant of the revenue type of restriction is found where the government owns a monopoly of the raw material. Here the restriction is through price. By exacting monopoly prices the government is enabled directly to enhance its revenues. This type of control is not widely prevalent, for as a rule governments content themselves with measures designed to promote the prosperity of the producers or the manufacturers of the raw material and with taxes levied upon this prosperity. Occasionally, however, such restriction through price is to be found. An example that will be discussed later is the Japanese camphor monopoly.

A second object of control has been the desire to maintain or increase the profits of the producers of the raw material. It has aimed at the regulation of production or marketing for the purpose of enabling the producers to obtain higher prices than they would otherwise obtain, and it has involved government action designed to furnish the means of such regulation. Such action has often gone no further than the mere publication and dissemination of statistics bearing upon present and future demand and supply, or of expert advice based on an interpretation of these data. These practices are very common and arouse but little criticism. Governments may go a step further, however, by enacting legislation designed to facilitate and regulate production and marketing by groups of producers, as in the encouragement of co-operative organization. Or they may go still further by providing credit facilities which would enable the producers to withhold

a portion of the available supplies from the market in order to increase prices. Such appears, for example, to have been the case in connection with the aid extended by the Japanese government to the producers of raw silk in 1920-1923.[6]

Still further in the direction of control is the resort to "valorization" by the government itself, through direct purchases by it of substantial portions of existing supplies and their withdrawal from the market, for the purpose of forcing higher prices. Perhaps the best illustration is the Brazilian control of coffee, of which more will be said later. Others include the purchase of cotton by the Egyptian government, of cocoa by the government of Ecuador, and of tin by the British Malay States.

Finally, the state may go the whole way by adopting or supporting measures designed to restrict output to the point that will yield the greatest profit to the industry. Sometimes it does this as an incidental, but indispensable, phase of the policy of maintaining prices previously set by the monopoly or syndicate to which its official support is given. Such a case is that of the German potash syndicate. Sometimes it undertakes directly and in the first

[6] In this case funds loaned by the government to producers for the purpose of pegging the decline in price of raw silk not only accomplished this purpose but enabled the producers subsequently to curtail output in such manner as to force prices far above their previous level. For an account of this, see U. S. Tariff Commission, *Broad Silk Manufacture and the Tariff*, 1926, p. 62. Concerning more recent activities of the Japanese government in respect to raw silk, see Appendix A, p. 362.

instance, not to support a rigidly set price, but to limit output according to some pre-established standard in the hope of securing for the producers as high a price as the traffic will bear. An outstanding illustration of this is the attempt of the British, through the Stevenson Restriction Act, to regulate the price of crude rubber. Both these illustrations will be discussed in later chapters.

There is obviously no precise way of drawing a line through this ascending scale of activities carried on by the state in aid of its producers in such a manner as clearly to distinguish those activities that tend seriously to burden foreign consumers from those that do not. At its core the distinction runs along that very faint line that separates so-called "orderly marketing" (that is, regulation of the supply offered for sale so as to adapt it continuously to the demand) from attempts to force up the price by a "speculative withholding" of the supply from the market. Whatever its credit facilities, no group of producers can have much success in speculative withholding unless it controls a large part of the supply. Controlling a large part, however, such a group may give the appearance of orderly marketing by selling regular weekly or monthly quotas and yet may be forcing up the price by making the quotas smaller than the available stocks would justify. Because of the difficulty in drawing the line, the cases which we shall discuss in this study are confined to those where the activities supported by the state have beyond question

been restrictive and thus have presumably resulted in higher prices for foreign consumers.

A third object of control has been the desire to foster and extend domestic manufacturing industry. Its purpose has been to favor domestic industries using the raw material by enabling them to secure it at a lower price than their foreign competitors have to pay. Usually, nations have sought to promote manufactures by means of import duties on the finished or semi-finished article. But the attempt to do so through restriction of exports of the raw material is an old and once familiar practice which, as we have seen, has recently shown a tendency to revive. Such restriction may differ in severity all the way from export duties only mildly discriminating in favor of home industry to complete embargoes.

Export duties and embargoes for protective purposes are not widely used in the industrially advanced portions of the world.[7] If there are

[7] There are, however, various restrictions throughout both older and newer countries upon the exportation of the means of production, such as machinery, descriptions of processes, seeds, plants, and animals, as distinguished from raw materials proper. Examples include South African restrictions on the export of ostriches, ostrich eggs, and Angora goats; prohibition by Egypt and by Tunis of the export of date shoots; and, of special interest to the pineapple growers of Florida, Cuba's embargo on pineapple slips. Cases of restriction of this sort have tended to diminish and are not very numerous. When natural resources, suitable labor, and available capital permit development of an industry, artificial restrictions on the transfer of the means of establishing it are apt to be evaded.

important competitive sources of supply, the chief effect of such restriction is likely to be a lowering of the domestic price of the raw material; and if the producers have sufficient political influence heavy duties will not long be tolerated. As the economic activities of a country become more diversified the tendency is, as we have already observed, to resort to other forms of taxation. Thus in Europe we find few export duties except those more or less temporary ones put into effect immediately after the War. The export duties imposed on cork by Spain and Portugal constitute perhaps the most important exception. Spain and Portugal have virtually a monopoly of the cork supply and both impose protective export duties. Such duties, however, have not prevented the development of cork processing industries in other countries.[8]

It is in the industrially undeveloped portions of the world, to repeat, that export restrictions for protective purposes have been chiefly employed. But they have not always been applied solely for the purpose of encouraging manufactures in the region producing the material. Two types of cases are to be distinguished in this regard. First are those where the country imposing them is politically independent, or virtually so, and hopes by its restrictions to promote manufactures within its own boundaries. A notable instance of this, of special

[8] Spain levies nearly $5.00 on each gross ton of cork exported and $1.00 a ton on scrap and waste, but permits cork manufactures to go out free. Portugal's legislation is of similar character but less drastic.

interest to the United States, is to be found in the restrictions imposed by Canada on the export of pulpwood for paper-making—an example that we shall discuss more fully in a later chapter. The other type is where the region imposing the restriction is a colonial dependency and the purpose is to favor manufactures in the colony, in the mother country, or in both. In such cases the usual procedure is to remit a part or all of the export duty when the product is exported to the mother country. That is to say, the duty is made discriminatory in favor of the mother country and tends to give her manufacturers a competitive advantage over rivals in foreign countries. Instances of this sort of restriction will likewise be dealt with in a subsequent chapter.

In the seven chapters which immediately follow we shall examine the evolution and operation of government control in the case of nitrates, camphor, potash, coffee, rubber, pulpwood, and a number of products which have been subjected to colonial discriminatory export practices. These are outstanding instances of control, and they illustrate the manner in which the various objects pursued and methods employed in the exercise of control operate in actual application. They indicate, in most cases, a growing improvement of control technique, but they also point to the limitations inherent in monopolistic or quasi-monopolistic control, to the consideration of which we shall subsequently give attention.

Following the discussion of the foregoing cases, all of them foreign controls, we shall examine certain practices of the United States in order to show how far they resemble those of foreign countries. We shall then be prepared to consider, in the closing chapters, principles and machinery for advancing the solution of the whole problem.

CHAPTER II

CHILEAN CONTROL OF SODIUM NITRATE

One of the outstanding instances of control of exports of an important raw material has been that exercised by Chile in respect to sodium nitrate. The history of this case presents several distinctive features. The control has been applied to a natural product, deposits of which are confined almost exclusively to a single country, and its primary object has been to obtain revenue for the government. In part the Chilean government's interest in the industry has been motivated by a desire to foster the country's largest industry and thus to promote the economic development of Chile. But in the main its interest has arisen from the more immediate circumstance that the industry is its leading source of revenue. The nitrate industry long supplied about half the Chilean revenue and still furnishes about a fourth of it, secured for the most part by means of an export tax. As a parallel of its fiscal policy the government has actively fostered close internal organization of the industry and the policy of price-fixing.

It is the purpose of the ensuing discussion to show the relation of the government to the industry—the objects, methods, and results of its policy. Before

taking up these matters, however, certain broad facts should be noted with reference to the international position of the industry and its place in the internal economy of Chile.

I. THE SETTING OF THE INDUSTRY

For many years the possession of the only known workable deposits of sodium nitrate gave Chile virtually a world monopoly of natural nitrate, and also gave her almost absolute control of the world trade in nitrate and its by-product, iodine.[1] In recent years, however, the fixation of atmospheric nitrogen and the yield of nitrogen compounds as by-products of several industrial processes have increased so rapidly that together they now furnish some three-fourths of the world output. It is no longer true, therefore, that the possession of a natural monopoly gives Chile anything like a monopoly of the world nitrogen market. On the contrary, there has been the keenest sort of competition in recent years between Chilean interests and the producers of manufactured nitrogen in other countries, particularly Germany.

[1] The natural deposits in Chile are in the form of sodium nitrate, sometimes also called nitrate of soda or Chile saltpeter. The commercial product is of two qualities: (1) a fertilizer grade, which contains from 91 to 95 per cent sodium nitrate, corresponding to about 15 per cent nitrogen; and (2) a refined grade with 96 to 97 per cent sodium nitrate, used in the manufacture of nitric acid and other chemicals. Ordinarily the larger part is consumed in fertilizer, though during the War the chief use was in the manufacture of explosives.

The table on this page shows the world consumption of pure nitrogen as contained in the various nitrogenous products, and the gradual increase in the proportion of synthetic manufactures.

WORLD CONSUMPTION OF NATURAL AND MANUFACTURED NITROGEN

(In thousands of metric tons of nitrogen content)

Year	World Total	Natural Nitrate		By-Product and Synthetic Nitrogen	
		Amount	*Percentage of Total*	Amount	*Percentage of Total*
(Calendar)					
1913.....	823	450	*54.7*	373	*45.3*
1914.....	765	395	*51.6*	370	*48.4*
1915.....	832	280	*33.6*	552	*66.4*
1916.....	1,127	465	*41.3*	662	*58.7*
1917.....	1,251	480	*38.4*	771	*61.6*
1918.....	1,314	460	*35.0*	854	*65.0*
1919.....	880	270	*30.7*	610	*69.3*
1920.....	1,283	405	*31.6*	878	*68.4*
1921.....	651	210	*32.3*	441	*67.7*
1922.....	712	170	*23.9*	542	*76.1*
1923.....	947	305	*32.2*	642	*67.8*
(Fiscal)					
1924–25..	1,073	363	*34.0*	710	*66.0*
1925–26..	1,187	324	*27.4*	863	*72.6*
1926–27..	1,312	275	*20.9*	1,037	*79.1*
1927–28..	1,602	391	*24.4*	1,211	*75.6*
1928–29..	1,872	419	*22.4*	1,453	*77.6*

Of the world production of nitrogen the Chilean output in the year 1928-29 constituted only about 22 per cent. Before the World War it had amounted to

more than half. Though the total consumption is now much greater than before the War, production of natural nitrate has hardly held its own; the entire increase has come from by-product and synthetic nitrogen. With respect to the significance of this recently increased competition from manufactured nitrogen more will be said later.

However much it may have felt the inroads of foreign competition, production of nitrate remains by all odds the most important single industry in Chile. A few figures will show how intimate its relation is to the economic life of the country.

From the standpoint of numbers engaged, agricultural and pastoral pursuits are, as might be expected, more important than any other. The latest available estimates indicate that of the 734,651 persons engaged in productive enterprise,[2] 533,500 are engaged in agricultural and pastoral industry; 102,706 in mining; 92,445 in manufacturing; and 6,000 in forestry. Of those engaged in mining, 63,241, or about 61 per cent, are employed in producing nitrate. From the standpoint of value of product the mining of nitrate is of much greater relative importance. For the value of agricultural and pastoral products there is no official figure, but a tentative and admittedly rough estimate by the United States Department of Commerce places the value for 1928-1929 in the neighborhood of $146,000,000. In 1927 official data showed the

[2] Out of a total of 1,721,365 persons gainfully employed.

value of manufactured products to be $173,218,000; of products of the mine, $153,585,000. Of the latter, nitrate (including iodine) accounted for $72,225,000; copper, $60,055,000; coal, $13,903,000; and minerals of minor importance, the remainder.[3]

Viewed as a part of the entire internal economy of the country it is clear that the nitrate industry constitutes a minor, though exceedingly important, part of the picture. As a source of exports, however, it far outranks other Chilean industries.[4] The table on page 31 shows for recent years the relative importance of nitrate and of iodine among Chilean exports.

Of total Chilean exports, those of nitrate and iodine comprised 49.1 per cent in 1926; 52.9 per cent in 1927; and 51 per cent in 1928. The only other product that approached nitrate in importance was copper, which comprised some 25 or 30 per cent of the total.

[3] The foregoing data, official and estimated, were furnished by the Latin-American Section, U. S. Department of Commerce. The figures, some of them highly tentative and uncertain, are taken from a more complete study in course of preparation by the Department.

[4] As the largest export industry it is doubtless also an important source of funds with which to pay for imports. Some of the exports do not, however, affect foreign exchange at all, owing to the fact that they go toward paying profits and interest on the large foreign investment in the Chilean industry. In a statement representing Chile's international balance of payments, such exports would presumably be included and then offset by a corresponding invisible item; but this should not be allowed to give an exaggerated idea of the importance of nitrate exports as a source of foreign exchange.

RELATIVE IMPORTANCE OF NITRATE AND IODINE IN THE TOTAL EXPORT TRADE OF CHILE
(In terms of value)

Domestic Exports	1926		1927		1928	
	Thousands of Dollars	*Percentage of Total Exports*	Thousands of Dollars	*Percentage of Total Exports*	Thousands of Dollars	*Percentage of Total Exports*
TOTAL.....	**198,317**	*100*	**203,943**	*100*	**238,862**	*100*
Sodium nitrate.	85,808	*43.3*	98,514	*48.4*	113,637	*47.6*
Iodine	11,487	*5.8*	9,184	*4.5*	8,041	*3.4*
Copper (ingots and ore).....	48,500	*24.5*	54,056	*26.5*	73,968	*31.0*
Iron ore.....	1,434	*0.7*	1,662	*0.8*	1,621	*0.7*
Calcium borate (borax)	2,496	*1.2*	1,774	*0.9*	1,221	*0.5*
Agricultural products, special group [a]..	18,510	*9.3*	16,054	*7.8*	24,692	*10.3*
All other.....	30,082	*15.2*	22,699	*11.1*	15,682	*6.5*

[a] Includes fresh or frozen meat, wheat, oats, barley, beans, peas, lentils, wheat flour, hides and skins, and wool.

II. THE RELATION OF THE GOVERNMENT TO THE INDUSTRY

In the light of these broad facts concerning the position and importance of the nitrate industry we are now ready to examine the relation of the Chilean government to the conduct of the industry. How has Chilean fiscal policy affected foreign access to the Chilean supply? What has been the attitude of the government toward monopolistic organization of the industry and what part has it played in fixing prices? In the pages that immediately follow, most

of the discussion will refer to events during the period 1919-1927—though for convenience we shall occasionally have to refer to later events. During the past three or four years marked changes have taken place in consequence of the rapidly growing competition from manufactured nitrogen; and of these we shall take note at the close of the chapter.

The Chilean government has approved, encouraged, and participated in the monopolistic organization and operation of the Chilean nitrate industry. The monopoly had not been originally organized and fostered by the government. But on July 2, 1919, and on February 10, 1921, the government formally approved the statutes of the Chilean Nitrate Producers' Association. The domicile of the Association is at Valparaiso, but it is represented outside of Chile by committees in New York, London, and Berlin, which direct publicity, carry out and supervise sales, and gather market information for the board of directors.[5]

Evidence of the government's participation in the affairs of the industry during the past decade is abundant. The government brought pressure to bear upon the few producers who stayed out of the organization when it was re-established in 1919, so that before the renewal of the agreement in 1924 it had succeeded in bringing in all producers except two American companies. The American firms maintained that the anti-trust law did not allow them to enter into a combination in restraint of trade.

[5] For a copy of the *Statutes* of the Association see Appendix D, p. 375.

These companies, however, which then controlled only some 3 per cent of the output, accepted for their product the market price established by the monopoly, and in other respects followed its rules and regulations.[6]

The interest of the government is further manifested through its official representation on the board of directors of the Association. The statutes of the Association provide for the appointment by the President of Chile of four of the eighteen directors of the Association.[7] These eighteen directors constitute the governing board and the executive committee and have very important powers, including the naming of prices at which nitrates must be sold[8] if 80 per cent of the directors present agree thereon.

The government has assisted the industry through substantial reductions of railroad rates on nitrates, petroleum, and coal. It has granted members of the Association exemption from import duties on bags for the exportation of nitrate. In this way it has done much to compel producers to become members. In 1928 it assumed further leadership in the industry by enacting a law which included measures for propaganda work and for the creation of a nitrate

[6] Bain, H. F., and Mulliken, H. S., U. S. Department of Commerce, "The Cost of Chilean Nitrate," *Trade Information Bulletin* No. 170, 1924, p. 64; and Curtis, H. A., "Our Nitrogen Problem," *Annals* of the American Academy of Political and Social Science, Vol. CXII, p. 177.

[7] *Statutes* of the Association, Articles 43 and 46. See Appendix D, p. 387.

[8] *Ibid.*, Articles 22, 23, 43-46. See Appendix D, pp. 381, 387.

bank to be established with government funds. It also took the initiative in the formation of a new joint selling agency that came into operation on September 21, 1928.

To check competition from German synthetic nitrate, the government announced in May, 1928, that a bonus would be given to the Chilean producers through the year 1928-29 equivalent to any reduction of price which might be agreed upon by the German syndicate in its June meeting. In this way the government proposed to countervail any reduction designed to facilitate competition with Chilean producers. In substance, the action taken was simply a provisional reduction of the export duty; and its purpose was plainly to prevent any reduction in the German price. Of these and subsequent measures in behalf of the industry more will be said later. Altogether it is clear that the Chilean government has shown itself active both in promoting the nitrate industry of the country and in maintaining a monopolistic organization of production and distribution.

On the other hand, there is no doubt that the heavy export tax long imposed by the Chilean government has been a burden to the industry. Since 1897 this tax has remained unchanged; namely, 3.38 gold pesos of the value of 18 English pence per metric quintal of 100 kilos. This amounts to 56 cents per hundred pounds, or $12.34 per metric ton of 2,204 pounds, when sterling is at par. It is assessed by weight and without regard to price. The duty has ranged generally from a third to a half of the

export value (exclusive of duty). Without considering for the moment whether the burden of the tax falls mainly upon the domestic industry or upon foreign consumers, it is clear that in either case the industry is burdened. To the extent that the burden is passed to foreign consumers, the higher price cannot but lessen sales in the face of competition from the synthetic product. To the extent that it falls upon domestic producers it must obviously lessen the profits of those in the industry.[9]

This heavy export tax has undoubtedly been a factor contributing to the difficulties of the industry. Six times between June, 1884, and the outbreak of the World War, the industry was organized and reorganized. In March, 1925, a petition by the directors of the Association for a reduction of the export tax was refused by the government, the state of the treasury being given as the principal reason. The Association then offered to cut the price two shillings per metric quintal (220 pounds) if the export tax were reduced by a similar amount. Such an agreement would, at that time, have lowered the price of nitrates by $9.60 per metric ton (2,204 pounds); but the government did not see its way clear to accept the offer. More recently, the government has made some slight concessions, as, for example, in the action taken in 1928 to countervail the price reduction made by the German syndicate to which we have already referred. But until then

[9] As regards the incidence of the duty see what is said below, pp. 41-44.

it had refused to accede to the pleas of the producers for a reduction in the duty.

In a sense, therefore, the government's relation to the nitrate industry has been a dual and conflicting one. On the one hand, it has actively fostered monopolistic organization and control of an industry based on a natural monopoly. On the other hand, it has been interested in exploiting the industry as a source of revenue for its own fiscal needs. But from a purely fiscal standpoint, it should be clear that the government's interest, so long as the export duty is specific, must be in increasing the volume of exports and not in limiting them. Precisely to the extent that prices to foreign consumers are raised above a competitive level by reason of the monopolistic organization of the industry that the government has itself fostered, and exports are thereby diminished, the policy of the government in fostering monopoly would appear inconsistent with its own fiscal interests. By encouraging monopoly and hence monopoly prices the government checks the volume of exports, and since the duty is specific, reduces its revenue yield. Nevertheless its revenue interest has always been paramount; and within the Association, as we shall presently see, its influence has always been cast on the side of moderation in price-fixing and encouragement of exports.

The Nitrate Producers' Association has customarily fixed the price of nitrates annually at the highest point which in its judgment the traffic would bear. The statutes of the Association provide that the board of directors shall designate during the

month of May or June of each year the selling price of the various classes of nitrate. Eighty per cent of the directors present must agree. The price is fixed for a whole year, subject to later revision.[10]

Without going into details regarding the grades and varieties of nitrates it may be said that the directors have established a basic price and provided for seasonal changes in it. So large a part of the nitrate is used for fertilizer that much the heaviest demand occurs when the farmers of the Northern Hemisphere, the greatest consumers, are preparing to plant their crops. Accordingly, the price has been so adjusted that it is highest for the period from January 1 to May 31, and lowest at the beginning of a new fiscal year in June, rising gradually every month or half month from June until January.[11] In fixing the basic price for the ensuing year the directors of the Association are, of course, compelled

[10] Article 22 of the *Statutes* of the Association reads, in part: "The Board of Directors may, however, whenever the fluctuations of international exchange or any unforeseen alterations in the price of fuel and other articles consumed in the nitrate industry may render it advisable, or whenever the conditions of the market may otherwise undergo a change, modify at any time the prices fixed by them." In 1922 and 1923 the base prices were changed during the nitrate year.

[11] This difference in price from month to month virtually takes account of the expense of storage during the slack season. The nitrate works operate more or less continuously and during the slack season store up their surplus for sale during the spring months. Naturally this surplus cannot be stored without the accumulation of carrying charges. Nitrate sold for delivery from June 15 to November 30 is termed "out of season" nitrate.

to take into account the probable demand at that price.

In fixing prices, however, compromise has always been necessary between individual companies whose position and interest were by no means identical. The prices actually agreed upon as the highest that the traffic would bear, though presumably higher than a competitive price, have never been so high as some producers advocated. The many companies that compose the Chilean Nitrate Producers' Association have not entirely agreed on this matter because in fact their interests have been partially conflicting. The more efficient or more advantageously located companies would profit by expanding their sales closer to their full productive capacity even though it meant some lowering of the price. The companies with higher costs of production would make greater profits by raising prices, which would tend, by curtailing sales, to curtail the total output. The traffic which will bear a price that gives a considerable margin of profit per unit to the high-cost companies is relatively small. The low-cost companies obtain a wide margin of profit per unit at a lower price and have been interested therefore in increasing the quantity sold. The policy of one group has sought higher price and smaller traffic; of the other, greater traffic and lower price.

In this controversy the interest of the government has coincided with that of the low-cost companies. The government's fiscal interest, as we have said, is in stimulating foreign sales of nitrates, since it receives a specific tax on each ton exported. The

greater the volume of sales the greater the public revenue. Accordingly the four government directors have commonly voted for, and have succeeded in having adopted, a lower price than that which in their absence would have been accepted as the compromise between low-cost and high-cost producers.[12] It is known, for instance, that in recent years the British companies have demanded a higher price than has been finally agreed upon,[13] and that the Chilean government and various Chilean companies have exercised a moderating influence in the price-fixing sessions.[14] The difference between the highest and the lowest prices seriously considered at the directors' meetings has, however, apparently been small. Thus in 1923 the total difference between the lowest and the highest prices urged was 1*s.* 10*d.* per quintal, equivalent to $3.80 per short ton or something like 10 per cent of the total price. An advance of four pence only, or 69 cents per short ton, was ultimately made by the directors of the Association.[15]

[12] According to a leading nitrate exporter, the nitrate policy of the Chilean government, as expressed by its most authoritative representatives, tends toward obtaining, among other things, two objects: first, that nitrate shall be sold at the lowest possible price, with the object of maintaining its competitive power, and its facility for opening new markets; and second, that this limitation of price shall be compensated by larger consumption. See also Bain and Mulliken, p. 46; and Curtis, *Annals*, p. 179.

[13] Pepper, C. M., Director of the Chile-American Association, *Annals*, Vol. CXII, p. 181.

[14] Bain and Mulliken, p. 60; and Curtis, *Annals*, Vol. CXII, p. 178.

[15] Bain and Mulliken, p. 60.

The prices fixed for 1925-26 and 1926-27 for 95 per cent sodium nitrate delivered free alongside ship at Chilean nitrate ports are shown in the following table:

PRICES OF CHILEAN NITRATE AT CHILEAN PORTS, 1925–26 AND 1926–27

Period	1925–26		1926–27	
	In Shillings and Pence per Metric Quintal	In Dollars per Short Ton	In Shillings and Pence per Metric Quintal	In Dollars per Short Ton
June	19/3	42.49	18/3	40.29
July	19/4	42.68	18/4	40.47
August 1–15	19/5	42.86	18/5	40.65
August 16–31	19/7	43.23	18/7	41.02
September 1–15	19/9	43.60	18/9	41.39
September 16–30	19/11	43.96	18/11	41.76
October 1–15	20/1	44.33	19/1	42.13
October 16–31	20/3	44.70	19/3	42.49
November 1–15	20/4½	44.98	19/4½	42.77
November 16–30	20/6	45.25	19/6	43.04
December 1–15	20/7	45.44	19/7	43.23
December 16–31	20/8	45.62	19/8	43.41
January 1–May 31	20/9	45.80	19/9	43.60

While the table does not include prices prior to 1925-26, it should be noted that the prices here given differ but slightly from those in 1923-24, the year which formed the basis of the investigation into the price of nitrates by the United States Department of Commerce, which is discussed below. In 1923-24 the range was from 19*s.* 3*d.* to 21*s.* At current exchange rates the average price

for that year, including the export duty, was equivalent to $41.81 a short ton. The export duty was equivalent in 1923 to $10.46 per short ton, so that the net price free of duty was $31.35. The export duty was therefore almost precisely one-third of the duty-free price of the product at the port of exportation. The reduction of 3*d.* per quintal ($0.55 per short ton) in the maximum price of nitrates between 1923-24 and 1925-26, and the further reduction of 5 per cent for 1926-27 were offset by the rise in the exchange value of the pound sterling, so that in 1926-27 the Chilean price (including the duty of $11.20 per short ton), when expressed in money of the United States, was approximately the same as in 1923-24.

III. THE EFFECTS OF CONTROL

The question now arises by how much the prices so fixed were higher than they would have been if there had been no monopolistic price-fixing and no export duty. Who paid the export duty? What would have been the effect of repealing the duty? How far would such repeal have moderated the price paid by consumers? And how far did the element of monopoly enter into the price?

The burden of the export duty has fallen upon both foreign consumers and Chilean producers. It has usually been assumed in the United States that the burden falls entirely, or almost entirely, upon American and other foreign consumers.[16] But the

[16] See, for example, the *Hearings* before the Committee on Interstate and Foreign Commerce, House of Representatives, 67th Cong. 1st Sess. on House Resolution 59, pp. 30 and 185.

assumption does not stand the test of analysis. It is, of course, obvious that the price paid by the consumer must include not only the producer's net price, but all the other charges, including the export duty, that intervene between producer and consumer; so that the price paid by the consumer does most assuredly *include* the export duty. It cannot do otherwise. But this does not at all mean that if the export duty had been repealed, the consumer would have received the benefit. The real question is how far the burden of the tax was ultimately borne by the monopoly and how far by the consumer.

Theoretic analysis, upon which we must solely rely for the answer to this question, definitely points to the conclusion that the burden of the duty was divided; that only a part of the burden fell upon the consumer. Indeed, it indicates that under certain conditions, not more than half the burden would fall upon consumers; but we cannot be certain to what extent these conditions are actually fulfilled.

It is a well-known principle that when a monopoly succeeds in fixing the price of its product at the point where the profit on each sale, multiplied by the number of sales, is greatest, it cannot increase its profits further by raising the price. This being true, it is an easy but a false jump to the conclusion that the removal of the export tax would not benefit consumers at all. Having already set the price at the most profitable point, it might be supposed that the monopoly would see that it remained at that point even though the export duty were repealed. In that event, obviously, the coffers of the monopoly,

not the purses of the consumers, would fall heir to the revenue surrendered by the Chilean government.

Such reasoning assumes, however, that costs all the while remain the same; whereas in fact the export tax is itself one of the costs of producing and marketing nitrate and its removal would therefore very substantially reduce total costs. But if costs are reduced, the price that will yield the greatest profit, the optimum or monopoly price, likewise becomes a lower price. It is a demonstrable proposition that the price is a function of a unit tax on the product of an absolute monopoly and hence that removal of the tax will lower the optimum price.[17]

So much for the theory. Now let us see how the situation would probably work out in practice. Bearing in mind that the price fixed by the monopoly has represented more nearly the point of view of the medium-cost than of the high-cost producers regarding what the traffic would bear, the presumption is that in case the duty were removed, the low-cost producers would seize upon the repeal as the occasion for demanding that the total price be fixed still further below the point advocated by the high-cost companies. Once more the interest of the low-cost companies in stimulating a great volume of sales would enter into the negotiations. Companies that had formerly interpreted "all that the traffic will bear" to mean a very high price would find it to their interest to maintain that the traffic would not bear so high a price. The outcome of the negotiations, if the monopoly functioned most fully in

[17] See Appendix B, p. 365.

its own intelligent self-interest, would be a reduction of prices."

It is reasonable to suppose, therefore, that the export duty imposed by the Chilean government, though it also burdened the producers, *did* result in a very considerable enhancement of prices to consumers—that in the absence of monopoly the prices fixed would have been lower than they actually were. Nevertheless it remains true that the mere existence of the monopoly, even had there been no export tax at all, would have assured higher prices to consumers than might have been expected under competition. Higher, but to what extent? Were the prices that prevailed under monopoly much higher than they would have been under competition? Were they reasonable or unreasonable?

The Chilean Nitrate Producers' Association in 1920-1927 set prices for nitrate much above the level that would probably have prevailed under competition. The mere fact that the industry was monopolistically organized and resorted to monopolistic price-fixing raises a presumption to start with that the prices charged were well above a competitive level. The rule that it is more profitable to expand output than to increase price holds true only after the profit per unit is high. The only exception

[1] The foregoing refers to the incidence of the export tax under a monopolistic organization of the Chilean industry. Quite different would be the situation under competition. In that case, the Chilean price would presumably be lower than under monopoly, but whatever duty was imposed would be added to the Chilean price and the burden of the tax would fall entirely upon foreign consumers.

is for industries in which expansion of output leads to great economies, and the nitrate industry—at least as it was conducted during the period under discussion—was apparently not one of these. The case is clearly one where we should expect, on theoretical grounds, that the monopoly set prices high.

Such evidence as is to be had accords with the theory. Before presenting evidence of a positive sort, however, it will be well to dispose of some of the fallacies that have been advanced in support of the opposite view; namely, that prices in 1920-1927 were reasonable, and that the monopoly was a generous and beneficent one. For instance, it has been argued that the price must have been reasonable because certain of the producers in recent years are known to have proposed a higher price than was accepted by the majority of the directors including the representatives of the Chilean government.[19] To say that the price was not set as high as some producers wished obviously proves nothing. That would happen in any organization in which prices were fixed by negotiation between constituent companies or groups. Somewhat more plausibly it has been suggested that the 1923 price was reasonable because it was only about 15 per cent higher than the 1914 price, whereas prices in general had increased by a considerably greater percentage.[20] But it obviously does not follow that because prices in general have risen they should rise, or rise in

[19] Pepper, *Annals*, Vol. CXII, p. 181.
[20] *Ibid.*, p. 180.

like degree, for all commodities. Indeed, the nitrate industry appears to be one in which costs have not risen very greatly above pre-war costs.[21] Furthermore, comparison with the pre-war price assumes that the pre-war price was not unduly high, a point upon which no proof is offered by those who make the defense. The "average pre-war price" was also in part a monopoly price. If the prices set in 1920-1927 *were* reasonable, therefore, such figures do not prove it.

On the other hand, evidence of a more positive character tends to support the conclusion that the prices set by the monopoly in 1920-1927 were in fact much higher than would have prevailed under competition. The reasonableness of the price of Chilean nitrate can be supported, if at all, only on the basis of cost data. The question is essentially one of fact. How far above the competitive price level (which approximates marginal cost) did the monopoly maintain the price of its product?

Evidence on this point is to be found in the inquiry

[21] Bain and Mulliken, p. 59. The Chilean government did not accept the argument that the prices which prevailed were justified by increased costs. The Chilean Minister of Finance said in regard to the price: "The enormous profits obtained by nearly all the nitrate companies, impossible to earn in any other industry, would have permitted the Association to fix a sale price of 36 pesos per metric quintal [$39.43 per short ton], on the basis of which there might have been sold in 1926 the same 25,000,000 metric quintals as in 1925, without signifying any other sacrifice to the manufacturers than that of a part of their huge profits." Ramirez, Pablo, "The Government and the Nitrate Problem," *Chile*, Vol. III, pp. 133-135.

of the United States Department of Commerce already referred to,[22] based on the year 1923-24. The investigators for the Department came to the conclusion that the invested capital was properly estimated at from $20 to $32 per ton of output capacity. They found that the profit commonly realized after making allowance for the amortization of the investment was $8.00 per ton of product, or from 25 to 40 per cent of the invested capital.

It is true that some companies that invested at the peak of war prices, like many elsewhere and in other lines that had similarly responded to the artificial conditions of war time, did not receive so high a return as this. But this raises the question whether such industries could justly expect permanently to secure as high a return on the money invested in such unfavorable circumstances as is received on investments made under more favorable conditions. Certainly their costs cannot be taken as the point from which to measure reasonableness of prices.

It has also been contended that the industry was entitled to a high return per ton of output, for instance in 1925-26, because it was not working at full capacity.[23] Such a contention is hardly valid.

[22] Bain and Mulliken.

[23] Total sales in 1925-26 were only 44 per cent of the nominal productive capacity of the industry. The sales were substantially as high as in previous years. Productive capacity for 1926-27 was about 5 per cent greater in spite of the way in which synthetic nitrogen had been curtailing the sales of sodium nitrate. The capacity for 1927-28 was further increased by the new Guggenheim plant at Coya Norte, which is larger than any previous plant. If there

The industry had been chronically operating far below its productive capacity, in other years as well as in 1925-26; and it had been doing so because of the overexpansion of the industry resulting from high profits secured in earlier years. To assume that consumers should bear the burden of maintaining an industry as greatly overexpanded as this is scarcely reasonable. The only possible justification rests on the rather tenuous ground that the whole productive capacity would be needed within a few years.

Further evidence that the prices charged for nitrate were materially in excess of the amount necessary to maintain the industry on a profitable basis is found in the price paid for quotas. At the time of the annual price-fixing, total sales for the year are estimated and on the basis of the tentative estimate reached, and of the capacity of each plant, shares or quotas of total production are assigned to each company. A company may either sell its quota or produce it. The tendency, of course, is for high-cost plants to sell their quotas and for low-cost plants to buy them. In its investigation covering 1923-24 the Department of Commerce assumed that the $6.00 per ton which was paid for the transfer of quotas gave an indication of the position of the marginal producers. This assumption is not quite accurate, but with some modification it is a rough measure of

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were not a large margin of profit in Chile, this expansion would not have taken place in the face of the expansion of synthetic production.

the excess of the monopoly price over what would have been the competitive price for the amount of nitrate that was actually produced under monopoly conditions.

To explain: In 1923-24, as we have seen, the price at the Chilean seaboard, exclusive of the duty, averaged slightly over $31 per ton. With quotas selling at $6.00 per ton this indicates that the entire amount allowed for sale during the year could be produced at a marginal *direct* cost of $25 a ton. We say "direct" because fixed charges would not enter into the computation of how much a plant could afford to pay for quotas. If the price of quotas had been more than $6.00 there would presumably not have been enough buyers who could afford to pay that price; if it had been lower, plants with a marginal direct cost in excess of $25 would have found it more profitable to produce nitrate than to sell their quotas, and plants with a marginal direct cost of $25 or less would not have been able to get as many quotas as they could profitably utilize. Assuming competitive bidding and a good marketing system for quotas, the price of $6.00 paid for quotas should just exhaust the difference between direct marginal cost and monopoly price. We conclude therefore that the total marginal cost, including fixed charges, for such nitrate as was produced by the monopoly must have been somewhat in excess of $25, and that the excess of $6.00 over the fixed charge per ton represents the element of monopoly profit.

It does not follow from the foregoing analysis,

however, that the marginal direct cost of $25 plus the fixed cost per ton represents the total marginal cost, and therefore approximately the price, that would have prevailed under competition. Presumably it does not. For under competition lower prices would have stimulated the demand; more would have been produced; and the additional amount would presumably have been forthcoming at a higher marginal cost than prevailed for the smaller total produced under monopoly conditions.

The industry made enormous profits during the period under discussion. An investigation by the Chilean government for the period up to 1927 showed that, after allowance was made for "general expenses, writing off, amortizations, service of loans, etc.," there was one group of companies, each with an annual production of over 6,700,000 metric quintals, whose profits in the seven years prior to the investigation were more than 50 per cent on their capital; that there was another group, each producing around 4,000,000 metric quintals, whose profits ranged between 25 and 50 per cent; and that nearly all of the remaining companies made between 10 and 25 per cent. Further, the government found that "there are many companies, the net profits of which appear to be lowered owing to the fact that they have increased the value of their nominal capital by distribution of shares or capitalization of the reserves; while others have spent their reserve funds to replace them later by loans of bonds issued abroad, which are included in the capital

invested, their interest and amortization being charged to the cost of production." [24]

By whatever standard they may be judged, such earnings are obviously high. For a government-fostered monopoly they are especially so. Such a monopoly has the elements of a public utility. The privilege that it enjoys of eliminating competition and controlling production removes so large a part of the risks of business that it does not remain entitled to high profits. An industry based on an exhaustible resource is, of course, entitled to amortization of its capital investment within the period of exploitation. In addition to this amortization, the return may well be limited to a rate of profit even less than that common in other industries. If the rate of profit allowed in an industry from which risk has been eliminated is no lower than that common to other industries, the investors are in effect receiving higher returns. The result will almost necessarily be overproduction, necessitating more severe restrictions, as is well shown by the history of the potash industry to which we shall refer later. The returns to the Chilean nitrate industry, even after payment of the export duty, were clearly much higher than common or normal returns.

IV. RECENT DEVELOPMENTS: COMPETITION, REORGANIZATION, INTERNATIONAL COMBINATION

Thus far the discussion has been based very largely upon conditions that had prevailed prior to

[24] Ramirez, "The Government and the Nitrate Problem," *Chile*, Vol. III, pp. 133-5. See also Bain and Mulliken, pp. 23-24.

1927. Up to that time competition from manufactured nitrogen, though it had been growing rapidly, had not induced the Chilean government to adapt its monopolistic policy to the needs of a fundamentally new situation. Since early in 1927, however, important changes in organization and policy designed to meet the new conditions have taken place.

Severe competition from manufactured nitrogen and accumulation of large stocks of nitrate led to temporary abandonment, in February, 1927, of the Chilean price agreement. Earlier attempts to meet an unsatisfactory market situation by fixing prices at a "reasonable" level and maintaining them by control of output had led to alarming results. From about 2,500,000 metric tons in 1925 exports had declined to 1,600,000 tons in 1926. Stocks on hand rose rapidly; and in the nitrate year 1926-27 production fell to the low level of 1,300,000 tons. Production of manufactured nitrogen having meanwhile rapidly increased, this figure represented scarcely more than a fifth of the total consumption for that year. In these circumstances restriction was abandoned, and for 18 months—from February, 1927, to August, 1928—unrestricted competition prevailed.

The result was what might have been expected. Prices fell; production and exports rapidly increased. In the calendar year 1927, with big stocks available for export, production remained low (1,600,000 metric tons of nitrate); but in 1928 it rose to 3,160,000 tons. From 1,600,000 tons in 1926, as

noted above, exports increased to 2,375,000 tons in 1927 and to 2,801,000 tons in 1928.

Upon the initiative of the government the Chilean producers entered into a new agreement in August, 1928. The agreement is a partial return to control of prices and sales; but it is a less rigid arrangement than the earlier one, designed not to maintain prices regardless of the competitive situation, but to limit competition within the Chilean industry and thus to enable the industry to present a united front to synthetic competition.[25] It provides for the formation of a selling combine empowered to fix prices for each large consuming center in accordance with the local competitive situation. Stocks of nitrate are carried in each center by the producers; and prices quoted, except in the United States,[26] include transportation and customs charges. Whatever the prices quoted in a particular market, the government guarantees to each producer who sells in that market, within the quota allotted to him, a price equivalent to 17 shillings per metric quintal, at the port of embarkation. This, in effect, is a sort of contingent reduction of the export tax.

[25] On this and other aspects of the competitive situation see Le Clerq, D. R., "Competition in the Nitrate Field," *Commerce Monthly* (National Bank of Commerce, New York City), March, 1929. See also the *Statist*, London, February 16, 1929, p. 268, and March 2, 1929, p. 358; and U. S. Department of Commerce, *Commerce Reports*, February 11, 1929, p. 328.

[26] Because of danger of prosecution under the Sherman Law, sales in the United States are based on f. a. s. prices from Chilean ports and existing sales agencies are not disturbed.

Greater flexibility and more moderation in its price-fixing policy;[27] economies in distribution by elimination of excess profits to distributors; and a minimum price guarantee by the government through what amounts to a reduction of export tax: these appear to be the outstanding features of the arrangement.

Whatever may have been the advantages of the new agreement, conditions still remained far from satisfactory. In 1929 production was even slightly greater than in 1928; and although there was a greater increase in exports than in production, much of the exported nitrate apparently remained unsold as a part of foreign stocks, for there was an increase of world stocks from 2,133,000 tons at the end of 1928 to 2,622,000 tons at the end of 1929.

In June, 1929, a tripartite agreement between Chilean interests and German and British producers of synthetic nitrogenous products was announced. For a number of years there had been discussion of the possibility of such an agreement. So long as the Chilean industry had been on the defensive, with stocks increasing, methods of production greatly in need of overhauling, and the Chilean government adamant in its refusal to approve any reduction of the export tax, there was little incentive or inclination on the part of the German and British producers to enter into any agreement acceptable to the Chileans.

[27] From August, 1928, onward through January, 1929, the price, f. a. s. Chilean ports (for non-European markets) ranged from 16*s.* 3*d.* to 16*s.* 7*d.* per metric quintal, or $35.86 to $36.60 per short ton. This is some 10 or 15 per cent below the level of prices before the old agreement was abandoned.

For some time, however, there had been indications that the Chilean industry might not remain on the defensive. Though other factors doubtless entered into the reckoning, there seems little reason to doubt that the vigorous efforts of the government to strengthen the Chilean industry and the prospect of increasingly severe competition from Chilean nitrate had put a new aspect on the situation. As we have already observed, part of the export duty had already been ear-marked for subsidizing the industry and the producers had reorganized their marketing system under a new agreement. In addition, improvements in technique such as the Guggenheim process were beginning to effect large reductions in the cost of mining the lower grade deposits and there were prospects of marked further advances in the productive efficiency of an industry in which manual labor had always predominated.[28]

Few details of the agreement have been made public, but its general outlines have been announced and widely discussed.[29] It is said to be essentially a

[28] Concerning the conditions leading to, and the significance of, the international agreement, see the *Chemical Trade Journal and Chemical Engineer*, June 28, 1929, pp. 603-4.

[29] After Dr. Carl Bosch, head of the German dye trust, had declared at the general stockholders' meeting of June 22, 1929, that his company had agreed with Chilean saltpeter interests on a co-operative plan of marketing fixed nitrogen salts, the German Nitrogen Syndicate (dye trust subsidiary) issued the following *communique* on June 26, 1929:

"Negotiations by the Chilean Finance Minister Don Pablo Ramirez with representatives of the I. G. Farbenindustrie A. G. and Imperial Chemicals Industries Limited have come to a satisfactory conclusion and have led to an agreement on close co-operation in future that assures the best possible

price convention, with additional provisions for a joint advertising program designed to eliminate cut-throat rivalry in respect to the merits of each other's nitrogen salts. Immediately following the agreement a very considerable reduction of prices was announced. Though the agreement, as announced, does not include any fixed allocation of production or export, it is widely assumed that provision will be made to control production and that markets will come to be apportioned more or less in accordance with geographic considerations and with the relative suitability of the artificial and the natural salts for the requirements of a particular area. The agreement is said to include 80 per cent of the current world production of nitrogen and it is expected that producers in other countries will be induced to come in.

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supply of nitrogen to agriculture. Propaganda (advertising) will occur in future along agreed lines. The strained condition of agriculture has been taken into consideration by lowering nitrogen prices, although these prices were already far below their pre-war level.

"The agreement does not apply to the United States of America."

The Chilean delegates subsequently visited London and secured the adherence of Imperial Chemical Industries, Ltd. to the pact.

CHAPTER III

THE JAPANESE CAMPHOR MONOPOLY

Different in some important respects from the control of nitrate has been the control of natural camphor. The Japanese camphor monopoly is a case, not of government-fostered private control of trade in an essential raw material, but of full-fledged government monopoly the profits of which are a part of the revenues of the state. For more than a quarter of a century the Japanese industry has been in the hands of the government, and the government has endeavored to control prices in its own interest. In so doing, however, it has not followed the policy of maintaining an inflexible price and adjusting production to it, as was for years the policy of the nitrate monopoly. From time to time it has been compelled to adapt its price policy to competition from outside sources. Particularly has it found this necessary with the rapid growth of competition from synthetic camphor that has occurred since the World War, of which more will be said later.

In the pages that follow we shall be concerned primarily to show the actual results that have attended the efforts of the Japanese government to control prices. But before discussing these it will be well to note certain facts concerning the nature

of the industry, its position in the Japanese economic system, and the extent to which the United States and other countries have been dependent upon its product.

Natural camphor is obtained from the camphor laurel tree. In the Orient trees are usually 50 years old before they are cut. The trunk, roots, and large branches of the tree are cut into small pieces and subjected to a current of steam which removes the camphor. After this distillation the crude camphor is refined. "Manufacturers," as they are called, licensed by the government, carry their stoves into the forests, locate the trees, and distil the crude camphor on the spot. Though there is some production in China, the bulk of the supply comes from the island of Formosa (under Japanese rule). A smaller but appreciable amount comes from Japan proper.

Camphor is used chiefly for making celluloid. Something like 80 per cent of it is now so used. A quarter of a century ago nearly three-fourths of it was used for medicinal and pharmaceutical purposes, and many persons doubtless imagine that these are still its main uses. Camphor forms with nitrocellulose a solution which has special plastic properties and is the basis of the pyroxylin plastics industry. The moving picture industry has thus been dependent upon it. Camphor offers, therefore, a good illustration of a "key" product—one of relatively small value upon which a very large industry is in considerable measure dependent; though this dependence has been lessened by the use of tricresyl

phosphate. Shortly before the War, however, synthetic camphor—derived from turpentine—came into use on a commercial scale and, as we shall show, it has since become an important competitor with the natural product.

The camphor industry is one of the minor Japanese industries. From Japan proper, exports of all commodities in 1927 were valued at $907,492,000, whereas the total exports of camphor from Japan and Formosa were valued at only $2,772,130. Even amongst the exports of the island of Formosa, the chief seat of the industry, camphor does not loom

JAPANESE EXPORTS OF CAMPHOR, TOTAL AND BY COUNTRIES, 1915-1927 [a]

(In thousands of yen)

Year	Total	United States		British India	Great Britain	France	Germany	Australia	Other
		Value	*As a Percentage of all Exports*						
1915	3,475	890	*25.6*	1,254	283	469	...	155	424
1916	6,287	3,124	*49.7*	1,559	593	387	...	88	536
1917	5,304	2,440	*46.0*	1,956	241	106	...	191	370
1918	3,686	1,108	*30.1*	811	767	265	...	229	506
1919	7,883	5,771	*73.2*	381	836	640	...	4	251
1920	4,965	1,298	*26.1*	1,997	654	138	...	125	753
1921	2,870	768	*26.8*	800	553	176	...	152	421
1922	7,247	4,431	*61.1*	781	800	431	...	174	630
1923	8,878	3,903	*44.0*	2,349	546	562	622	260	636
1924	6,919	3,156	*45.6*	1,501	512	495	442	166	647
1925	7,276	3,175	*43.6*	1,321	797	648	485	183	667
1926	5,742	2,441	*42.5*	1,432	357	559	171	201	581
1927	5,637	2,274	*40.3*	1,168	407	221	391	183	993

[a] Compiled from *Japan Year Book* for 1929 and earlier years.

very large compared with some other products. In 1927, total exports from Formosa were valued at $116,949,000, of which camphor and camphor oil accounted for only $2,335,000. The total figure includes, it is true, exports to Japan, amounting to over 80 per cent of all exports; and it includes most of the rice and sugar which together comprise the bulk of Formosa's exports. But even of Formosa's exports sent to foreign countries camphor appears to have comprised not more than 10 per cent.

Japanese exports of camphor are sent to various countries, but the United States is the largest consumer. The position of the United States and of other leading countries in the export trade is shown by the table on page 59.

In terms of value exports to the United States have ranged all the way from one-fourth to three-fourths of Japan's total export of camphor; but during the last five years shown in the table (1923-1927) they steadily ranged between 40 and 45 per cent. British India is the chief market apart from the United States, but considerable quantities go also to Great Britain, France, Australia, and Germany.

The extent to which the United States, the leading market, has been dependent upon Japanese supplies is disclosed by our own import figures. The following tables show the imports by the United States of crude and refined camphor since 1910, and of synthetic camphor from Germany since this product first began to be separately shown in our import statistics. We include also the average import price of each in cents per pound.

IMPORTS OF CAMPHOR INTO THE UNITED STATES, 1910-1929 [a]

I. Crude Natural

Year [b]	Total (In thousands of pounds)	Average Value (In cents per pound)	From Japan		From China	
			In Thousands of Pounds	*As a Percentage of Total*	In Thousands of Pounds	*As a Percentage of Total*
1910	3,027	30.5	2,326	*76.8*	620	*20.5*
1911	3,726	30.0	3,446	*92.5*	254	*6.8*
1912	2,155	31.7	2,153	*99.9*	...	...
1913	3,709	27.2	3,275	*88.3*	164	*4.4*
1914	3,477	26.7	3,416	*98.2*	61	*1.8*
1915	3,729	26.9	3,696	*99.1*	32	*0.8*
1916	4,574	27.0	4,377	*95.7*	197	*4.3*
1917	6,885	30.5	6,688	*97.1*	186	*2.7*
1918	3,638	39.9	3,235	*88.9*	317	*8.7*
1919	2,694	93.0	1,532	*56.9*	1,100	*40.8*
1920	3,833	134.9	1,509	*39.4*	2,324	*60.6*
1921	1,079	67.9	253	*23.4*	802	*74.3*
1922	2,460	63.2	1,465	*59.6*	988	*40.2*
1923	3,486	60.4	2,171	*62.3*	1,252	*35.9*
1924	1,848	54.1	721	*39.0*	1,126	*60.9*
1925	2,369	54.9	2,090	*88.2*	253	*10.7*
1926	2,019	57.4	1,886	*93.4*	133	*6.6*
1927	1,690	48.0	1,621	*95.9*	69	*4.1*
1928	4,365	37.8	4,365	*100.0*	—	—
1929	4,204	37.6	...	...	...	...

II. Refined Natural [c]

Year [b]	Amount (In thousands of pounds)	Average Value (In cents per pound)	Year	Amount (In thousands of pounds)	Average Value (In cents per pound)
1910	407	37.6	1920	847	202.4
1911	442	33.4	1921	442	78.6
1912	244	37.4	1922	2,537	70.1
1913	463	33.0	1923	3,436	73.5
1914	509	32.0	1924	1,912	64.4
1915	1,110	34.9	1925	1,514	60.6
1916	1,706	32.3	1926	1,165	65.2
1917	3,529	44.4	1927	1,481	55.6
1918	1,103	70.4	1928	1,176	50.5
1919	1,873	179.6	1929	1,431	55.4

III. Synthetic [d]

Year [b]	Amount (In thousands of pounds) [e]	Average Value (In cents per pound)	Year	Amount (In thousands of pounds) [e]	Average Value (In cents per pound)
1920	120	195.1	1925	1,798	50.1
1921	[f]	[f]	1926	2,870	53.1
1922	18	60.9	1927	2,941	43.4
1923	489	61.9	1928	2,265	35.7
1924	682	55.4	1929	3,957	34.8

[a] Compiled from *Foreign Commerce and Navigation of the United States.*

[b] Fiscal years to and including 1918; subsequently calendar years.

[c] Almost wholly from Japan.

[d] Almost wholly from Germany. Prior to 1920 imports were not separately stated but were probably negligible.

[e] Imports of synthetic by countries of origin were not given prior to 1925. The figures here given are imports for consumption.

[f] There is an obvious error in the quantity for this year as reported in the official statistics. The figure for total value, however, was less than $18,000, as contrasted with $234,690 in 1920.

Of crude camphor, widely varying proportions of our imports, in some years more than half, in others virtually none, have come from China; but on the whole Japan has been the chief source even of the crude product. For several years after the War imports of crude fell below previous levels, but in 1928 and 1929 they rose again to the highest levels (excepting in 1916 and 1917) attained in the entire period since 1910. Refined natural camphor imports, though three or four times as large as before the War, tend to remain more or less constant. Of the refined, virtually the entire amount has come from Japan; so that it is correct to say that the bulk of

our imports of natural camphor in all its forms comes from Japan.

Most striking of all, however, is the marked growth in our imports of the synthetic product, as shown in the third part of the table. Up to 1923 the quantity brought in was negligible. Since that time it has increased until it now constitutes some 40 to 50 per cent of our imports of camphor in all forms.[1] Concerning competition of synthetic with natural camphor more will be said later.

The Japanese government maintains a complete monopoly of the collection and sale of raw camphor. This control has been maintained since the beginning of the century. There are two branches of the monopoly. By far the more important is the Formosan monopoly, which was established in 1899—four years after Japanese acquisition of title to the island.[2] The Formosan monopoly is maintained as a subdivision of the Formosan government. The other branch, controlling the industry in Japan and dating from 1903, is under the direction of the Bureau of Monopolies, which has charge also of the fiscal monopolies of salt and tobacco. The two branches are therefore legally distinct entities, though both are operated under the Japanese law of 1903.[3]

[1] Imports of "crude" are really a semi-refined product and for rough calculation can be treated as refined.

[2] For a century and a half previously the Chinese had maintained, with occasional lapses, a monopoly of the Formosan trade. In 1868 the monopoly was abolished; in the eighties it was re-established; but in 1891 it was again abolished.

[3] Monopoly Bureau, Tokyo, the *Outline of the History of the Monopoly System in Japan*, p. 16.

Selling prices of crude natural camphor, whether for refiners in Japan or for export, are fixed by orders issued from time to time by the Imperial Japanese Government and promulgated in the government's "Official Gazette." Prices to be paid to producers by the Bureau of Monopolies, the quantities of crude camphor to be produced in a given period, and the quantities allotted for sale within Japan and abroad are regulated in the same manner. Back of the government's power to control prices is its power to control output. This it may do by limiting the number of collectors;[4] and it may limit sales by withholding both the raw and the refined product from the market.

The control measures adopted by the Japanese government have had two main objects: first, to secure higher prices for camphor and thus to increase the public revenue; and second, to encourage the domestic camphor refining industry. With these two phases of control we shall deal in the order given.

The history of the monopoly affords evidence that it has been measurably successful in the past in controlling prices. The evidence, it must be admitted, is not wholly conclusive. But such as is available tends to confirm the supposition that, in so far as competition from natural and synthetic camphor produced outside of Japan has permitted, the monopoly has been successful in exacting higher prices from consumers than would presumably have been possible

[4] *Crude Camphor and Camphor Oil Law of 1903*, Art. IX.

in the absence of monopoly. And until a few years ago this competition was usually not formidable enough to constitute a very serious check.

The first evidence of successful control is to be found in behavior of prices and exports before and after the establishment of the monopoly. Analysis of the import figures for the United States from 1894 through 1909, as given in the following table, tends to show that the monopoly was in some measure successful from its beginning.

UNITED STATES IMPORTS OF CRUDE CAMPHOR, 1894-1909

Years Ending June 30	Quantity (In thousands of pounds)	Value (In thousands of dollars)	Average Value per Pound (In cents)
1894	1,323	309	23.4
1895	1,500	284	18.9
1896	945	328	34.7
1897	1,469	332	22.6
1898	2,047	365	17.8
1899	1,807	322	17.2
1900	1,789	485	27.1
1901	2,175	732	33.7
1902	1,831	516	28.2
1903	2,508	764	30.5
1904	2,819	874	31.0
1905	1,904	638	33.5
1906	1,668	608	36.5
1907	3,138	1,572	50.1
1908	2,814	1,365	48.5
1909	1,990	602	30.3

It will be noticed that the price of camphor, as revealed in the average annual value of the imports, doubled in the two years immediately following the

establishment of the monopoly in 1899. Since the price was abnormally low in 1898 and 1899, this comparison is somewhat misleading. But even when we compare the average for the period of 1894-1899 with that for 1900-1905, inclusive, the increase is still from 22.4 cents a pound to 30.7 cents, or nearly 40 per cent. By 1907 and 1908 the price had considerably more than doubled. It is true that the general price level was also rising during these years; but the rise in camphor prices was considerably greater.

Comparison of annual changes in value per unit with changes in quantity imported suggests further evidence of successful price control. It shows that for the most part the value per unit in the years prior to 1899 was greatest in years of small importation and smallest in years of large importation; but that in the period following 1899 the years of large importation were usually also years of high price. This analysis would seem to indicate that in general the monopoly succeeded, after 1899, in taking advantage of demand conditions in a way that had not been previously possible.

Further evidence of effective control is contained in the profits realized by the monopoly in the earlier years. The profits of the Japanese camphor monopoly (not including the Formosan) reached a maximum with the high prices of 1905-1908. They are given below for the earlier years after the organization in 1903, and for occasional years during the past

decade. The figures are for fiscal years beginning April 1.[5]

1903	$136,346	1911	$ 59,058
1904	348,822		
1905	363,982	1918	134,500
1906	569,693		
1907	439,652	1920	113,000
1908	108,529		
1909	23,345	1924	156,894
1910	37,822	1925	220,482

The profits of the Formosan monopoly were presumably much larger, but actual figures do not seem to be available except for the earliest years. According to a Japanese writer, the Formosan monopoly lost $150,000 in 1899, but made a profit of $793,000 in 1900 and in 1901 a profit of $543,000 plus $254,000 on camphor carried forward.[6] These profits were obtained by paying a maximum of about 11 cents per pound and selling for over 33 cents. No details of administrative and other expenses are available. As to profits during later years when prices rose, especially in 1907 and 1908, there are no figures; but they must have been much larger than in the earlier years. For 1919 and 1921 the profits are said to have been $2,581,000 and $979,500, respectively.

[5] *Japanese Financial and Commercial Annual,* 1910 and 1911. There are discrepancies in the figures published for the years following 1911, and publications beyond 1921 do not separate the profits derived from camphor, salt, and tobacco. Post-war figures were supplied by the American Commercial Attaché in Tokyo.

[6] Takekoshi, Yoseburo, *Japanese Rule in Formosa,* 1907, p. 178.

There is evidence, however, that at least a part of the first profits of the monopoly was secured by depressing the price paid to the producers. Under the Chinese régime the Formosan producers had been receiving from 22 to 33 cents a pound for the crude product. But with the establishment in 1899 of the monopoly under Japanese control the prices paid were reduced to about half what they had formerly been and were the occasion of widespread discontent in the industry.[7] There is not much reason to doubt that in these earlier years the monopoly was no less effective as a buyers' than as a sellers' monopoly. Even in subsequent years the margin between the prices paid to the producers and those received by the monopoly was apparently wide.[8]

Further indication of at least partial success in the policy of price control is to be found in the

[7] *Ibid.*, p. 176. The payments to the "manufacturers" (those who carry their stoves into the forest and locate and distil the crude camphor) that were established in 1899 were 11.2, 10.1, and 9 cents a pound for the three grades of camphor respectively at the station Taihoku, and 5.6 cents for camphor oil. At the five other Formosan stations the prices were somewhat less, notably at Rinkiho, namely 8.2, 7.4, and 6.7 cents for the three grades of camphor, and 4.1 cents for camphor oil.

[8] In 1903 the price paid to producers in Japan averaged about 19 cents a pound, while the average foreign value of imports into the United States was 30.5 cents. In 1908 the corresponding figures were 24 as against 48.5 cents, and in 1909, 21 as against 30.3 cents. See Monopoly Bureau, Tokyo, *Outline of the History of the Monopoly System of Japan*, p. 38; also *Laws and Regulations Relating to Government Monopolies in Japan*, 1910, table on p. 161.

period since the War. In common with other prices, that of camphor soared to unprecedented levels during and immediately after the War. Owing to the demand for camphor in the manufacture of explosives, surgical bandages, disinfectants, and for pharmaceutical purposes, the Japanese government was in a strong position to exact high prices; and the fragmentary data given above show that profits were large. Though the price fell sharply after 1920, it still remained nearly double the pre-war price. That this post-war price must have contained a large element of profit is suggested by what subsequently happened. In order to meet the growing competition from synthetic camphor, the monopoly, on May 1, 1926, reduced the price by 25 per cent; and in July, 1927, by a further 15 per cent. In 1928 there were still further reductions. Had the price prior to these reductions been a purely competitive price, such drastic cuts could hardly have been made without bringing ruin to the industry. That they were indeed a blow to the industry is evidenced by the fact that in 1927 and in 1928 the Japanese and the Formosan governments refrained from incorporating in their respective budgets any expected returns from camphor. And yet production and exports have continued on a scale sufficient to suggest that earlier prices must have contained a considerable element of monopoly profit.[9]

[9] According to the *Japan Year Book* production of crude camphor was: in 1922-23, 1.9 million pounds; in 1923-24, 1.7 millions; in 1924-25, 1.9 millions; in 1925-26, 4.7 millions; in 1926-27, 4.1 millions; and in 1927-28, 1.6 millions. For refined camphor, the figures were, for corresponding years:

We come now to the second phase of the restrictive policy applied by the Japanese government; namely, the measures taken to foster domestic refining.

The Japanese government has consistently favored the domestic refining industry through direct control of the distribution of supplies of crude camphor. The charge has also been made that the government supports the domestic refiners and the celluloid industry by price discrimination in their favor, but available evidence does not support the charge. In 1907, to be sure, the substantial price reduction that the monopoly was forced to make was accorded to the domestic market two months before it was extended to the foreign market.[10] This and one or two other instances of discrimination are to be noted. But if it has been practiced on any considerable scale, certainly the available figures do not show it.

On the contrary such evidence as we have points on the whole to substantial equality of treatment in the matter of price. Thus in 1910 the most expensive grade of Japanese camphor was not officially priced for export, but the second quality sold for 30 and 30.4 cents a pound for the home and export markets, respectively, while the other grades were

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3.3; 4.1; 3.1; 3.5; and 3.1, with 1927-28 not available. For camphor oil they were: 1.5; 1.7; 3.3; 4.5; 3.7; and 2.8 million pounds. Data on the total quantity exported are not available; but the table on page 61 indicates that the amount taken by the United States (the largest market) in 1928 and 1929 was about double what it had previously been.

[10] Monopoly Bureau, *Outline*, p. 34.

quoted at 29.2 and 29.3 cents, respectively.[11] Nor does evidence of price discrimination appear in the following table:

FOREIGN AND DOMESTIC SALES OF JAPANESE CAMPHOR, 1903-1909

Year	Exports			Domestic Sales		
	In Pounds	In Dollars	Cents per Pound	In Pounds	In Dollars	Cents per Pound
1903.....	429,910	125,818.91	29.3	46,735	13,680.34	29.3
1904.....	738,189	202,242.45	27.4	423,800	159,887.39	37.7
1905.....	666,956	228,370.83	34.2	432,709	148,180.62	34.2
1906.....	931,119	398,896.71	42.8	437,270	187,272.99	42.8
1907.....	594,532	257,127.80	43.2	449,437	193,111.42	43.0
1908.....	91,080	38,996.16	42.8	574,690	181,009.34	31.5
1909.....	1,191,271	349,729.65	29.4	1,095,218	330,209.39	30.2

In only two years of the seven included in the table was there any substantial difference in the average value per pound for domestic and foreign sales, and in one of these (1904), strangely enough, the domestic value per unit was distinctly higher. In 1908 the reverse was the case. So far as these figures go, they indicate no discrimination. If there has been discrimination which the available figures do not reveal, it is probably much less important than other methods of fostering the refining industry.

It is primarily through allocation of supplies of crude camphor that the government has encouraged the domestic refining industry. In 1913 the policy was adopted, in Japan proper, of restricting the

[11] *Laws and Regulations*, p. 205.

exports of crude camphor to foreign requirements for celluloid only. In 1918 the same policy was extended to Formosa through an imperial ordinance prohibiting the further export of crude camphor to foreign countries for refining purposes. The ordinance permitted the export of the raw product to foreign countries for celluloid manufacture; but even in this regard it stipulated that celluloid manufacturers in Japan should be given preference over those in foreign countries in the allocation of supplies. In 1919 extension of the prohibition to include even crude camphor for celluloid manufacture, for the purpose of enabling Japan to control the world celluloid markets, was favored by the Bureau of Monopolies of the Imperial Government. The proposal failed of adoption, however, owing to the opposition of the Governor General of Formosa, who contended that the total suspension of exports would greatly encourage the synthetic camphor industry abroad at the expense of both the camphor and the celluloid industries of Japan. The policy of prohibiting exports for refining purposes remains, however, in full effect.

Supplies of crude camphor are allocated for export by three-month periods and orders must be placed by importers before January 1, April 1, July 1, and September 1 in each year for the respective requirements for each succeeding three-month period. It is claimed that this policy prevents speculation, makes possible better adjustment of production to demand, prevents deterioration of the manufactured product, and helps to maintain prices. By tending

to prevent the crude camphor from falling into the hands of firms that might engage in camphor refining, it has aided the policy of confining foreign sales to bona fide manufacturers of photograph and cinematograph films, celluloid, and pyroxylin plastics.

Production of synthetic camphor has tended increasingly to limit the power of the Japanese monopoly. For the past twenty years competition, or the threat of competition, from synthetic camphor has been at all times a limiting factor in the operations of the monopoly. As early as 1907 this specter temporarily loomed on the horizon. In that year the price rose far above earlier levels. Two notable results followed. The chief immediate result was a very sharp increase in Chinese exports of the natural product. In 1905 these had amounted to only 717,000 pounds; in 1907 they rose to 3,200,000 pounds. But of even greater ultimate significance was the fact that American producers began for the first time to put synthetic camphor on the market. In order to eliminate the competition thus developed, the Japanese monopoly reduced the price from about 50 cents to 30 cents a pound and it remained at from 26 to 31 cents until after the beginning of the World War.

Again, during and immediately after the World War, high prices of natural camphor brought into the market synthetic camphor, both of American and of German production. At post-war prices American producers have not been able to compete

successfully,[12] but imports of synthetic camphor from Germany, as already observed (see page 62), have increased so rapidly that they are now almost equal to those of the natural product. By 1926 competition from this source had become so severe that the Japanese government was compelled to institute the series of drastic cuts in prices to which reference has already been made. How formidable has become the competition from synthetic is shown by the fact that the price, as indicated by the average value of imports, has for several years been lower than that of crude camphor.[13] This so-called "crude" is mostly a semi-refined product and is used more or less interchangeably with the synthetic in the pyroxylin plastics industry. It is chiefly between these two that competition prevails. For some branches of the pyroxylin industry, however, most notably in the rapidly growing manufacture of

[12] The U. S. Tariff Act of 1922 put a duty of six cents a pound on synthetic camphor. Several American companies have subsequently attempted to manufacture it but, with one exception, have been forced to discontinue. One company, in New Jersey, is now (March, 1930) said to be manufacturing about 500 pounds a day. The pending tariff bill, as it passed the Senate, places a duty of one cent a pound on crude natural camphor and of five cents a pound on refined and synthetic; but it provides for reduction of the duty on synthetic to one cent if domestic production is not over 25 per cent of domestic consumption after three years, 30 per cent at the end of four years, or 50 per cent at the end of five years. The House bill had carried a duty of one cent a pound on synthetic and on crude natural, and six cents a pound on natural refined. Action on these bills is pending as this book goes to press.

[13] See table on pp. 61-62.

non-breakable auto-glass, the synthetic variety is almost exclusively used.

To conclude: It is clear that for the present the power of the Japanese government to control the price of camphor has been seriously compromised by the advent of the synthetic product; and in the absence of any international agreement such as has been recently consummated for the nitrate industry, it looks as if this would continue to be the case. It is equally clear, however, that for a good many years the policy of control met with a large measure of success; and inasmuch as natural camphor is still a large factor in the world camphor supply there is still a possibility that the Japanese government can exercise considerable influence upon prices. At all events, the methods and results that have attended her attempts at control in the past afford a good illustration of one type of restriction with which this book is concerned.

CHAPTER IV

THE FRANCO-GERMAN POTASH COMBINE

We come now to another type of restriction. In nitrate and camphor we have given illustrations of monopolistic control by governments over access to raw materials in which the control was motivated chiefly by the desire to obtain revenue. We shall now consider some instances in which almost the sole purpose of restriction has been to enhance the profits of investors in the industry producing the raw material. In none of them has the desire to obtain revenue been more than an incidental feature. With the first case, the potash monopoly, we shall deal in the present chapter; with two others, coffee and rubber, in Chapters V and VI.

In several respects the potash case is distinctive. It is a clear case of an international combine affecting a raw product. Until the end of the World War it had been a German monopoly. But the acquisition by France of the Alsatian deposits as an outcome of the War temporarily split the monopoly and, after a time, led to the so-called Franco-German potash agreement that is the basis of the present international combine. This combine controls something like 95 per cent of the world output and in this sense is a more complete monopoly than any other with which we shall deal. In

France, it is almost entirely a government monopoly. Eighty per cent of the Alsatian production is controlled by the government; and all the output of the industry, including any that may be forthcoming from newly opened shafts, must be sold through the official sales syndicate. In Germany, the industry is not strictly a government monopoly, since most of it is privately owned.[1] But so complete is the domination of the controlling syndicate by the German government that, in effect, it falls not far short of being one. The potash case is, moreover, the only instance among those that we are to discuss in which the policy of price discrimination in favor of domestic and against foreign consumers has characterized the history of the monopoly.[2]

The potash case is all the more significant when one looks to the future, for there is no imminent prospect that the power of the Franco-German combine will be seriously checked by competition from other sources. In recent years, it is true, geological and chemical discovery has brought forward a little competition, and this will perhaps increase to some extent.

There has been some increase in production in the United States, but the bulk of the domestic supply is still imported. In 1923-1926 production averaged some 23,000 short tons of oxide of potash (K_2O); but imports averaged about 250,000 tons, or more than 90 per cent of the total consumption.

[1] A few mines are owned by the Prussian government.

[2] At least, until recent years. As regards present policy see what is said on pp. 116-21.

Since that time domestic production has more than doubled. In 1928 it was 59,910 tons. But as imports, in terms of pure potash content (K_2O), were 330,493 tons in 1928, it is evident that the United States is still dependent upon foreign sources for by far the greater part of her supply. The American production is from brine lakes, distillery waste, and other sources in which for the most part the potash is either a by-product or is associated with important by-products. The search in the Southwest for workable strata of potash salts has not yet resulted in any production from that source, though mining operations are said to be in prospect.

Spain and Poland are exploiting potash deposits similar to those of Germany, though their production is still insufficient to supply their respective needs. Immense deposits of potash are reported to have been found in Russia, and the potash of the Dead Sea may eventually be worked. But with the possible exception of Spain and Poland, there are no countries in which competition from domestic sources has developed, or bids fair soon to develop, to the point where it is likely to exert much influence on the prices charged by the Franco-German combine.

In the present survey we shall first show what has been the nature of the German government's relation to the industry in the past as it is reflected in the legislative history of the monopoly. We shall then endeavor to appraise the results of the restrictions that have been in effect in recent years.

I. EVOLUTION OF GOVERNMENT CONTROL OF THE INDUSTRY

The history of the potash monopoly, covering nearly three-quarters of a century, has been long and varied. We must therefore content ourselves with only a brief summary of events as they serve to reveal the growth and purpose of government intervention in the conduct of the industry.

Throughout its earlier history the potash monopoly was the object of increasingly active government encouragement. Indeed, the production of potash had its beginning as a government monopoly. It was in a salt mine belonging to the Kingdom of Prussia that potash was first worked when its importance was realized about 1858. This first monopoly was, however, of short duration. It was soon found that potash deposits extended over much larger areas, and it was not long before private producers entered the field and private interests became dominant in the industry.

It was not until 1879 that what the Germans distinguish as the first real syndicate was formed. Twice prior to that time—in 1864 and again in 1876—price agreements had been made; but in the absence of provision for regulation of production, both had proved unsatisfactory. In 1879, therefore, the Prussian government definitely undertook, in the interest of private owners, to set a limit on the total quantity of "carnallite" [3] to be produced

[3] A low grade material containing between 9 and 12 per cent of oxide of potash (K_2O). For a popular and chemical description of the various potash salts mentioned herein, see Turrentine, J. W., *Potash*, 1925.

annually, and quotas of this total were apportioned among the mines then in operation. In 1880 another agreement, affecting kainite,[4] further restricted production. It was the renewal of this agreement in 1884 that introduced the policy of discriminating against foreigners by charging them prices higher than those charged to domestic consumers[5]—a policy that continued without interruption for many years and is still countenanced in the German law.

In 1883 the first sales syndicate for muriate of potash (refined potash salt) was formed. A commission representing the syndicate allocated orders among members in accordance with quantities of raw materials allotted under the carnallite agreement (which had just been renewed) and fixed prices subject to the proviso that any increase must be approved by the Prussian government.

In 1888 production was turned over to a syndicate held together by a series of ten-year contracts among the seven mines.[6] In the functioning of this syndicate the Prussian government acquired new powers. The Prussian Minister of Commerce and Industry

[4] A low grade material with 12-15 per cent of oxide of potash. Higher grades are made by concentrating the crude materials.

[5] Krische, Paul, *Das Kali*, Stuttgart, 1923, Vol. I, p. 204. The dates quoted are those when the various agreements became operative.

[6] Muriate factories that were not operated in conjunction with any particular mine were compelled, in return for assurance of adequate supplies of crude salts, to conform to all conditions of output and sale of refined products laid down in the new agreements and to refrain from encouraging the opening of new mines.

was empowered to set the price at which potash was to be sold in Prussia, to lower the price whenever it seemed advisable to increase sales or essential to the welfare of German agriculture, and to veto any change in the quotas allotted to the mines. In 1898 the agreement was renewed for three years on the basis of a single contract; and in 1901 it was again renewed.

With the reorganization of the monopoly in 1905 as a limited liability company the Prussian government further strengthened its position. The new organization assumed complete control of the marketing of the whole output of the industry, and all individual trade marks were eliminated. The syndicate as then organized functioned through three commissions or bureaus known as the General Assembly, the Supervisory Council, and the Business Management. The General Assembly, consisting of one member from each mine, selected eight members of the Council, declared dividends, decided terms of sale, and had certain other powers. The general control of operations was in the hands of the Supervisory Council, the chairman of which was selected by the Prussian Minister of Commerce and Industry. To this body was consigned the responsibility of choosing the officials constituting the Business Management and of controlling its operations.

The Business Management was divided into a central department, an agricultural bureau, and the business management proper. This last was divided into sections dealing, respectively, with crude salts,

concentrated products, transportation, and the peculiarly important branch of the business designated as the American trade. The Business Management fixed prices annually under the guidance of the Supervisory Council. But as the right to fix the price for domestic sales was retained by the Prussian Minister of Commerce and Industry, and as no change could be made in prices already prevailing for foreign sales without the votes of the government's representatives, it is clear that in the final analysis the price-fixing power rested largely with the government. In order to guarantee observance of the contract each company member of the syndicate had to deposit the sum of 300,000 marks. The syndicate also could fine any company which broke the contract.

In 1910 the fixing of prices became a direct function of the Imperial German Government. The syndicate of 1905 expired in 1909, but was soon reorganized. Under the new organization the fixing of prices under the joint authority of the private officials of the syndicate and the officials of the Prussian government ceased, and thenceforth this important function was given over completely to the Imperial German Government. Accordingly, on May 25, 1910, the Reichstag enacted a law fixing prices for domestic sales to prevail until January 1, 1914, and providing that thereafter the Bundesrat or Federal Council, after consultation with mine owners and German consumers, should fix prices for the ensuing five years. Potash salts could not be sold for export at a lower price than that fixed for the German

market except with the consent of the Bundesrat. All profits were to be pooled and divided according to the quotas allotted to members of the syndicate. The allocation of quotas was placed in the hands of a special commission of seven members, of which the chairman and two others were selected by the Chancellor, subject to ratification by the Bundesrat. Quotas were transferable among the members; but if more than half of the total share allotted to a particular mine was to be transferred, the approval of the government had to be obtained.[7]

As a result of the War, production of potash became an international monopoly. The retrocession of Alsace-Lorraine transferred a considerable proportion of the potash deposits to France, and the French government assumed possession and undertook the operation of all the ceded mines except four. The mines in this territory were of later development than most of those retained by Germany and on the whole their equipment was newer. The possibility of effective competition from them had been recognized by the German syndicate as soon as the first Alsatian mine started producing in 1910, and to restrain it the syndicate had allotted to the Alsatian mines a quota of only 5 per cent of the permissible annual output. This restriction, of course, ended

[7] This law contained also special provisions (but in general terms) designed to enable the syndicate, with the support to the government, to force the cancellation of low-priced contracts with American interests that had been made by powerful independent interests outside the syndicate, and thus to force them to enter the syndicate. With this phase we shall deal elsewhere. See footnote 17, p. 98.

with the acquisition of the territory by France and the way was opened for the overthrow of the German monopoly.

Negotiations for the control of competition began, however, soon after the property was ceded. For several years they were without result owing to the unwillingness of the Germans to grant to the French government a satisfactory share of the export market. Meanwhile the French government prepared for a thoroughly efficient operation of its mines and it was evident from the great capacity of the industry on both sides of the border that competition was likely to be severe.

The first agreement between France and Germany, pertaining to the American market, was reached in August, 1924. The agreement provided that the price of potash upon the American market should be maintained at $27 per ton of 80 per cent chloride of potash. The prices of other potash compounds were fixed in certain proportion to the price of chloride. It was also agreed that Germany should supply 67½ per cent and the Alsatian mines 32½ per cent of the potash sold to the United States. Sulphates of potash were divided in a different proportion, the Germans being allotted 35,000 tons and the French 5,000 tons per annum.

On May 7, 1925, a second agreement reserved the markets of France and her colonies and of Germany to the producers of the respective countries and divided the rest of the world between them in the proportion of 30 per cent for the French and 70 per cent for the Germans. These were the shares of the

total sales allotted to each country; but for economy in delivery it was further agreed that the Germans should supply Eastern Europe and that France should supply certain other markets, in addition to her colonies.

A third agreement, effective May 1, 1926, though not finally ratified until December 29 of that year, replaced the earlier agreements and is still in effect.[8] It maintains temporarily the ratio of 70 to 30 for sales outside of Germany, France, and French colonies, but assures to France 50 per cent of sales beyond 840,000 tons of pure potash, or, beginning with the sixth year, 50 per cent of sales beyond the highest annual total in any of the first five years. It provides for the establishment of a joint commission of control and of common sales agencies and publicity organizations in foreign countries, so as to maintain exact control over quotas and prices. Sales and deliveries are to be checked three times each month. The monopoly seeks to control the price of all products containing any appreciable amount of potash.

Pending completion of the negotiations with France, the German government had consolidated its control of the potash industry. The government of the Republic showed itself even more disposed to assert its control than had been that of the Empire. The German law as it now exists is the result of acts passed by the Reichstag in 1919, 1921, and 1924. It requires all producers of potash to join the union or syndicate. It provides for government control

[8] For the text see Appendix D, p. 393.

of the industry partly by state officials or with their approval, and partly by special committees which are in large part appointed by the government after nomination by interested parties. Control is centralized in the Federal Potash Council (Reichskalirat), which consists of 30 members, 8 of them representing owners of potash mines and factories, 8 representing employees, and 14 representing other interests, including consumers, dealers, and technical experts. In addition there is an elaborate series of bureaus and committees set up in connection with the administration of the industry. Federal authority is exerted through the Minister of Economy, who has the right to be represented at all meetings by officials clothed with authority to contest any action not in accord with the law. The law further provides for the regulation of the price in the domestic market and leaves the price in the foreign market to be set as the monopoly deems expedient; but the monopoly must obtain special permission from the Minister of Economy if it desires to grant, for potash to be exported, a price lower than that fixed for sales for consumption in Germany. It thus continues the previous policy of regulating the domestic price while leaving the monopoly free to exact whatever price it can secure from foreigners. The law eliminates competition in marketing.

Finally, it should be noted that these statutes prepared the way for later economies in production costs by limiting the number of mines in operation. Under the Act of 1919 the Potash Council is

authorized to prevent the opening of new shafts and, subject to certain safeguards, to close works already operating. The Act authorizes the Council to deny quotas to works whose costs are regarded as excessive. Owners of mines may sell their quotas and close their works voluntarily, subject to certain safeguards as to workers. The laws of 1921 and 1924 are designed to supplement and carry forward this program of "rationalization" of the industry, by offering further inducement to the inefficient works to close for a long period of years (until 1953) in return for permanent, transferable production quotas, and by further extending and defining the authority of the government to take mandatory action. With respect to the course of events that actually followed this legislative program of rationalization, more will be said presently, when we come to consider and appraise the results of government encouragement and regulation of the potash industry.

Looking back over the whole history of the monopoly, one is able to discern two main, and partially conflicting, objectives of government intervention in the conduct of the industry: first, enhancement of the profits of the owners—whether state or private—of potash mines and factories; and second, protection of interests of German agriculture by assuring to it adequate supplies of fertilizer salts at reasonable prices. These have not, of course, been the sole motives. In the earlier years of the monopoly, when all or most of the production was in

government mines, the direct fiscal interest of the government in the prosperity of the industry was an important factor, and to some extent it is still a factor; but its relative importance has diminished with the rapid development of private ownership. Another, and an increasingly important, motive has been the concern of the government for the welfare of workers in the industry and for other domestic interests. But the two first named appear to have been the main objectives, while the others have been either phases of, or subordinate to, them. On the one hand, there has been the desire, as a phase of national economic policy, to obtain in the foreign trade of the country whatever benefits could be derived from the exploitation of a natural monopoly. On the other, there has been the desire to maintain and strengthen domestic agriculture in the interest of economic self-sufficiency and national defense. Given these two motives, it is not surprising that price discrimination as between foreign and domestic markets should have come to prevail.

In carrying out its purposes, however, the government has made notable shifts in the emphasis of its policy. So long as Germany possessed a natural monopoly—that is, up to the end of the War—the primary concern of the government was with the price rather than the cost side of the situation. By compelling all producers to join the syndicate and thus eliminating competition in the sale of potash, and by cultivating and extending the world demand for potash, the government hoped to obtain—and in fact, as we shall see, succeeded in obtaining—high

prices for the producers. Because prices were high new shafts were always coming into the field and compelling a reduction of quotas to individual mines far below their productive capacity. The result was a vicious circle of high prices, overexpansion of productive capacity with its resultant inefficiency and high cost, and then the need for higher prices. So long as Germany had a natural monopoly, this inefficiency was a luxury that could be afforded and the government took no really drastic step toward limiting expansion of capacity. But with the breakup of the monopoly through the return of Alsace to France, an entirely new situation developed. If the industry was to hold its own in competition with the French, reorganization and a reduction of costs were indispensable; and while there may have been other factors also, in the main it was the prospect of competition from the French that impelled the government to undertake its program of rationalization.

II. THE RESULTS OF GOVERNMENT CONTROL

In the light of the foregoing discussion of the evolution and purpose of government policy, we are now prepared to consider its results. To what extent, if at all, have foreign consumers been burdened by the monopolistic policy fostered by the government?

The evidence that we are about to present indicates that the prices charged for potash in the past have been considerably higher than might have been expected to prevail under competition. Though the

consumer has enjoyed remarkable stability of prices,[9] he has had to pay for it. In part prices have been made high by the inefficient organization of the industry that for many years prevailed under, and was the outgrowth of, the government's monopolistic policy. In part they have represented monopoly profits. Both these aspects of the subject call for more detailed consideration.

Consumers were for many years heavily burdened by the inefficient organization of the potash industry. Having virtually a complete monopoly, the syndicate would presumably have charged prices above a competitive level even though the industry had been efficiently organized. In fact, however, it was not, until recently, so organized. On the contrary, the situation was for many years such as to insure the continuance of inefficient mines in operation, to diminish thereby the profits of the monopoly, and at the same time to induce it to charge higher prices to consumers than a more efficiently organized industry would have found it profitable to charge.

Evidence of past inefficiency on the part of the potash monopoly and of the nature of its effects is plentiful. In the main, as we have seen, the inefficiency resulted from the policy of keeping all mines

[9] After several small increases of price in 1889-1893, the prices of potash remained practically unchanged until 1910 when they were reduced by approximately 10 per cent. There have been subsequent changes, but in neither extent nor frequency have the changes been as great as would presumably have been the case under competition.

in operation by apportioning among them quotas of the full production agreed upon. It was inefficiency in the sense of ineffective organization for economical production. Assured quotas and substantial profits kept bringing new producers into the field. It was therefore continually necessary to restrict quotas per mine. No mine was allowed to produce at capacity. Finally the industry attained a productive capacity four or five times as great as the demand at the prices fixed by the monopoly, and this was followed by allotments of quotas which were small fractions of the possible output of the mines.

The increasing inefficiency of the industry is reflected in the declining average output of oxide of potash per shaft (as indicated by sales) between 1900 and 1920. This is disclosed by the following data:[10]

Year	Number of Shafts	Total Sales (Metric quintals)	Average Sale per Shaft (Metric quintals)
1880.....	4	685,800	171,450
1890.....	8	1,223,000	152,900
1900.....	15	3,036,100	202,400
1910.....	68	7,337,200	107,900
1913.....	164	11,103,700	67,700
1920.....	201	9,236,600	45,600

In 1900 the average sale was 202,400 metric quintals of potassium oxide. In 1910 it had fallen to 107,900, and in 1913 to 67,700 quintals. By

[10] Krische, *Das Kali*, I, 257. The figures for 1910 and 1913 include shafts in Alsace, which were ceded to France prior to 1920.

1920, although total sales had trebled, each shaft averaged only 45,600 quintals.

In recent years there have been great improvements in the organization and efficiency of the industry. The drastic reforms authorized by the laws of 1919 and 1921, to which we have already referred, began to bear fruit in 1923. Within the short span of two or three years they had culminated in the complete reorganization, the so-called "rationalization," of the industry.[11] Under these laws, plants were closed one after another or else placed in reserve for emergency operation only. The table on page 93 shows the rapidity with which the whole process took place.

Within five years the production per working plant more than trebled and the number of workers per unit sold was reduced by half.[12] At the end of 1928 there were 228 shafts and 8 independent refineries in the industry. Of these, all the independent refineries and 121 of the shafts had been closed until 1953; and of the 107 remaining works 47 were held in reserve for emergency operation. The pro-

[11] For a time most of the potash works did not take advantage of the opportunity afforded by the law to close down voluntarily in return for assured quotas. But with the stabilization of the currency, the working out by the public authorities of more liberal inducements for voluntary closing, and the beginning of a rapid process of concentration of ownership as a phase of the whole process of rationalization, the movement took on rapid impetus after 1923 and for the most part was consummated by the voluntary action of the industry itself.

[12] In 1922 the number of workers had reached the high point of 48,667. By 1927 the number had declined to 18,454. *Arbeit*, July, 1928.

duction quotas of the definitely closed works amount to nearly 45 per cent of the total for the entire industry.[13]

EFFECTS OF RATIONALIZATION OF THE GERMAN POTASH INDUSTRY UPON SALES PER WORKING PLANT AND NUMBER OF EMPLOYEES PER UNIT SOLD [a]

Year	Number of Plants with Quotas	Number of Plants Actually Working	Total Sales (In thousands of metric quintals)	Sales per Working Plant (In thousands of metric quintals)	Number of Workers per Thousand Metric Quintals Sold
1913.....	164	152	11,102	73	29
1921.....	205	155	9,211	59	40
1923.....	220	126	8,859	70	40
1925.....	224	85	12,255	144	25
1926.....	228	66	10,999	167	20
1927.....	228	60	12,394	207	18
1928.....	229	60	14,214	237	19

[a] Official data based on findings of the Committee of the Reichstag Investigating Causes of the Industrial Crisis in Germany, and quoted in an article on the German Potash Industry, by Dr. Georg Katona, in *Der Deutsche Volkswirt*, September, 1929.

Greatly as the organization of the industry has been improved, however, there still remain some vestiges of the burden from earlier overexpansion of mining capacity. In so far as quotas of poor mines have been transferred to efficient companies—and in the main, such transfers have been

[13] Concerning the effect of reorganization of the industry upon costs, see pp. 106-11.

made—they constitute a charge against the profits of those companies but not a charge against the profits of the syndicate as a whole. The cost of producing potash has been lowered by the transfer of production to efficient mines and the profits are distributed throughout the syndicate on the basis of the final production quotas agreed upon. Yet the situation is not quite the same as if no poor mines had ever come into the field; nor the same as if, having come in, they had been absorbed or eliminated by the low-cost companies without receiving any shelter from the government through the medium of its influence on the policy of the syndicate. Companies transferring quotas are compelled to make partial compensation to employees and the cost of supporting them is an overhead expense that persists in spite of rationalization.

Better evidence of the persistence of burden from earlier overexpansion, however, is the sharp division that prevails in the councils of the syndicate—the bickering and manoeuvering between the larger and the smaller companies. One faction, the so-called Wintershall group, persistently advocates lower prices to stimulate sales, the closing of unprofitable shafts, and the building of large-scale plants to reduce production costs. But it has been constantly checked by an alliance of the other members, the so-called "antibloc" or anti-Wintershall group, which, aided by the government, has thus far been successful in preventing the Wintershall group, if not from influencing, at least from dominating the policy of the syndicate. Were it not for the restrain-

ing influence of this antibloc, it is quite possible that potash would be supplied to American and other foreign consumers at prices substantially below those that have in fact prevailed. The process of concentration has led to great economies in production,[14] but it has not been suffered to go the full length to which it might extend. Noteworthy also is the fact that the effect of the Franco-German agreement has been to safeguard the high-cost German producers against the competition of the low-cost French producers.[15] Within the German syndicate, as well as in negotiations between it and the French producers, it is only too clear that there is always compromise in the interest of high-cost producers.

Before turning to the profit element in the prices charged for potash in the past, one further point in regard to this matter of inefficiency should be noted. It should not be assumed that all the past burden from overexpansion of the industry has been borne by consumers. For it is reasonable to suppose that part of it, possibly the greater part, was borne by the industry itself through reduced earnings.

To explain: It has been shown that the monopoly continued for years to keep many more mines in operation than were required to produce the amount of potash that was in fact mined. That is to say, the same amount of potash, had it been procured

[14] More than 80 per cent of the German potash is produced by three concerns, two of them antibloc.

[15] See what is said on this point on p. 104.

from the more efficient mines by simply shutting down the inefficient ones and discontinuing their quotas, could have been produced at a much lower total cost. And yet, having a complete monopoly, the industry could still have continued to exact monopoly prices for its products. Gross receipts from the sale of potash would still have been not far different from what they were under the quota system; whereas total expenses of production would have been less, and total profits greater. It matters not in the present connection why this latter course was not the one followed. It is enough that the policy actually applied resulted in higher costs of production and tended thereby to reduce the aggregate earnings of the industry.[15]

[15] And yet it presumably tended also to raise the prices charged to consumers. At least, such would have been the tendency assuming the monopoly had succeeded in setting prices at the most profitable point. Without going into a technical discussion of the reasoning, with the requisite diagrams, suffice it to say that it can be easily proved that charges on an industry which vary with the output *do* affect the monopoly price, while charges which are in the nature of a flat tax, independent of output—as, for example, certain overhead charges—*do not* affect the monopoly price. In the present instance the working of inferior mines with the consequent limitation of the output of the superior mines far below capacity is, in part at least, a charge of the first type and the monopoly price *is* affected. It is true that the industry is one in which fixed charges constitute a relatively large proportion of the total and in which, therefore, the tendency is for total costs to vary less with increase in output than would otherwise be the case; so that inefficient organization of the industry may well have been more burdensome to producers than to consumers. But to the extent that unit costs were increased, the most profitable price under monopoly conditions would have been higher than the price which it would have paid to charge prior to the increase of costs.

We turn now to the profit side of the analysis. Here the evidence appears to indicate (1) that monopoly profits were a large element in prices in the pre-war period; (2) that they were not a very large element in the earlier years after the War, except in the French part of the industry (after its rehabilitation); but (3) that in more recent years the profit margin has considerably widened.

Prior to the War the prices charged American consumers by the German syndicate contained a large element of monopoly profit. This fact was clearly shown by what happened during the short period of competition that prevailed in 1909-1911. Immediately following the failure of negotiations for renewal of the syndicate in June, 1909, three of the companies formerly belonging to the syndicate, the so-called "Schmidtmann interests," announced that contracts had been made for the sale of their entire output to American dealers at prices that were from 25 to 40 per cent below those that had been charged before the syndicate lapsed. These contracts were binding for two years, with the privilege of renewal for five more years; so that the prices agreed upon could not have been merely temporary "cut-throat" prices. After the renewal of the syndicate late in July (1909), but while the Schmidtmann interests were still operating independently, measures were instituted by the government and the syndicate, working in unison, that compelled the repudiation by the three independent companies of their American contracts and within a year or two brought the

recalcitrants back into the syndicate.[17] But what had already happened was sufficiently instructive, for it disclosed that the prices charged by the syndicate contained a large element of monopoly profit.

Nor did the syndicate long remain satisfied merely to maintain prices at their existing level. Within a year or two from the settlement of the controversy and the re-inclusion of the independents in the syndicate, prices at Atlantic ports were

[17] This incident serves to illustrate the extremes to which the German government was at that time willing to go in maintaining the monopoly and in exploiting foreigners. The three independent companies, one of which was the Virginia-Carolina Chemical Company and one an Austrian company, could not enter the new organization and maintain these American contracts, since the contracts were at prices much below syndicate prices. To compel their adhesion was a primary purpose of the law of 1910. (See footnote 7, p. 83.) This law effectively disposed of the contracts. The American importers had obligated themselves to pay any "export duty or other governmental charges." This undertaking, as well as the contract to purchase the whole of the output of the contracting mines, had been made in the natural expectation that the contractors would not be subjected to discriminatory legislation. The Reichstag, however, after full debate enacted by a large majority the law of May 25, 1910. This law authorized a committee of the syndicate to fix arbitrarily the amount of potash each mine could produce and sell free of tax, required that half this amount be reserved for German consumption, and imposed a heavy tax on sales in excess of the tax free total set by the committee. Since the American contracts were for amounts far in excess of the total that the contracting mines could export free of tax (after half their tax-free quota had been reserved for domestic consumption), the net result was to make the contracts unremunerative. The tax levied on the excess tonnage was approximately 100 per cent of the prices stipulated in the contracts. Thus, on muriate of potash, the price was increased by the tax from $20.40 a ton, c. i. f. Atlantic ports, to $40.50 a ton, which was

increased by some 15 or 20 per cent over the level at which they had previously stood. There is not much room for doubt, therefore, that prices in the pre-war period were much higher than an efficiently organized industry, taking a reasonable profit, would have been compelled to charge.[18]

For several years after the War, profits per unit sold appear to have been fairly small. It is quite true that the mere fact of a decline in price as compared

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about $5.00 a ton in excess of the syndicate price. In the course of the controversy the Bundesrat was authorized to reduce the duties upon previous contracts so that the price would not be higher than the old syndicate prices and the Americans "would lose only the speculative profits they endeavored to obtain by taking advantage of the unfortunate condition of the German potash market." (See Williams, B. H., *Economic Foreign Policy of the United States*, p. 389.) But the old syndicate prices were far above the contract prices. In the ultimate settlement, partial compensation was finally made for the damages inflicted in the course of the controversy. But it was only partial, and it does not lessen the significance of the incident. It is noteworthy that after these contracts were thus nullified the provision that accomplished that result did not appear in later laws. For an account of this entire matter, see U. S. Department of Commerce, "Potash," *Trade Promotion Series* No. 33, 1926, pp. 11-22; also Williams, *op. cit.*, pp. 387-91.

[18] Whether, under competition, the entire American demand could have been met at prices so low as those contracted for by the three independent companies is uncertain. These contracts were for amounts equivalent to about two-fifths of the American consumption. It has been argued that Schmidtmann's contracts could not have been fulfilled at a profit; that they rested on an overestimation of the possibilities of his works. (Krische, *Das Kali*, I, 237.) But it seems certain that the whole demand could have been met at prices much lower than those actually charged by the syndicate.

with the pre-war price is not of itself conclusive on this point, as has frequently been contended. From 1922 to 1925 prices, c. i. f. Atlantic ports, were, on the average, nearly 20 per cent below pre-war (1910-1914) prices. There is no theoretical reason, however, why they might not still have contained a large element of profit. Pre-war prices, as we have seen, were so much above a competitive level that a considerable reduction would have been possible without necessarily eliminating all traces of monopoly profit. For several years, moreover, the declining value of the German mark made even low (gold) prices profitable. By the early part of 1924 the mark had been stabilized; but by that time the reorganization of the German industry had initiated economies in production that might well have enabled the industry to maintain prices below the pre-war level without reducing the margin of profit on its products.

ESTIMATED COSTS AND PROFIT MARGINS IN AMERICAN SELLING PRICES OF POTASH SALTS

(In dollars per short ton)

I. German Salts, 1924 [a]

Item	Kainite 14% K_2O	Fertilizer 20% K_2O	Salts 30% K_2O	Chloride 50% K_2O	Sulphate 53% K_2O
Cost, c.i.f. American Atlantic ports	6.58 [b]	8.58	13.74	27.27	38.51
Official selling price less 10%	7.425	9.495	15.33	29.97	40.14
Profit [c]	.845	.915	1.59	2.70	1.63
Profit as a percentage of cost	*12.84*	*10.66*	*11.57*	*9.90*	*4.23*

II. French Salts, 1923 [a]

Item	Sylvinite		Fertilizer Salts ($30\%K_2O$)	Chloride ($50\%K_2O$)
	14% K_2O	20% K_2O		
Cost, c.i.f. American Atlantic ports	6.60	7.60	9.32 [c]	18.05
Official selling price less 10%	7.20	9.495	14.43	29.97
Profit [f]	.60	1.895	5.11	11.92
Profit as a percentage of cost	*9.09*	*24.93*	*54.83*	*66.04*

[a] U. S. Department of Commerce, Bureau of Mines, "Potash Mining in Germany and France," *Bulletin* No. 274, p. 86.

[b] The figure given on p. 86, *Bulletin* 274, has been corrected by using $1.83 for $2.87 as the cost at the mine, the former figure being taken from the tables on p. 74.

[c] Includes "quota charges" amounting to 31 cents, 43 cents, 66 cents, $1.10, and 73 cents on the various salts in the order as given.

[d] U. S. Bureau of Mines, *Bulletin* No. 274, p. 86.

[e] See also *ibid.*, p. 78, which shows that the discrepancy in the column for fertilizer salts as given on p. 86 arises from misprinting of the figure for cost at the mine, which should be $3.82 instead of $5.82.

[f] Includes 20 per cent tax on profits, equivalent to 23 cents, 49 cents, $1.12, and $2.55 on the various salts in the order given.

In point of fact, however, there is evidence tending to show that the profit margin in the German industry was not wide. The United States Bureau of Mines has published detailed estimates of production costs of the German industry in 1924 and of the French industry in 1923. The table on pages 100-01 gives the estimated costs per short ton, c. i. f. American Atlantic ports, for certain typical salts, together with selling prices and profits.

The costs as given in this table include the aver-

age cost at the mine, based on figures including about half the total product of the industry; inland and ocean freight charges amounting to $4.35 a ton for the German salts and $4.60 a ton for the French; and other marketing costs varying from 40 cents to $1.50 a ton on the different salts. They include amortization charges; and they include whatever burden of expense may have resulted from cost of administering the syndicate and from operation of poor mines. They do not include quota charges that, for the German industry, were estimated at from 31 cents to $1.10 a ton for the various salts. Such charges are sometimes erroneously considered a cost of production. In reality, however, for the industry as a unit, they are simply a part of the total profit—a redistribution of profits by which "closed-down" and "reserved" mines are enabled to share in the profits made by the operating companies to whom their quotas are transferred.[19]

[19] It is necessary to avoid confusion of "quota charges" with the burden that has resulted from the quota system as such. In so far as the allocation of quotas has tended in the past to bring into operation, or keep in operation, high-cost shafts that, on purely economic grounds, would better have been kept out of the field, it has undoubtedly been a burden to consumers—a cost that must have tended to increase the prices that consumers had to pay for potash. This we have already discussed (see pp. 90-92). But the transfer of quotas and the accompanying "quota charges" are not an additional burden. They are, of course, a charge against the profits of those to whom they are transferred, but they do not diminish the profits of the industry as a unit. On the contrary, precisely because quotas are transferred, expenses of production in the industry as a whole are presumably diminished and total profits increased.

This matter of quota charges does not arise in connection with the French figures. There is, however, a tax of 20 per cent on net profits in the French industry, and this we have not deducted from the profit margins. It is true that, in contrast to the situation as regards quota charges, this tax is a charge against the profits of the entire industry. But as the French government owns the mines, such a tax merely results in the transfer of profits from one pocket to the other and can therefore be treated as a part of total profits.[20]

One further explanation: The costs given are average costs, and there may be some question as to the propriety of using these rather than "marginal" costs in showing profits. It is doubtful, however, whether this seriously affects the results. Certainly it would not do so in respect to the German figures, since these are for a profit-sharing syndicate.[21]

On the German salts the profit margins, as percentages of total cost, vary from 4.23 per cent for sulphate to 12.84 per cent for kainite. In the absolute, these margins are obviously not great. It is true that if the ratio of total sales to investment were

[20] Moreover, such a tax, though it would reduce the net profits of the industry, would not, under monopoly conditions, increase the monopoly price.

[21] In a profit-sharing organization a high-cost producer may find that prices fail by, say $1.00 a ton, to cover his production costs; but if the average profit of the whole pool is $1.50 a ton, his final net profit is nevertheless 50 cents a ton. In fact, however, the costs given by the Bureau of Mines, for each of the five districts into which they divide the German industry, *were* covered by the official prices less 10 per cent discount, with the exception of potassium sulphate.

high, margins even narrower than these might yield a high return on investment. Margin of profit per unit of sales is obviously not a reliable measure of the profitability of an industry. But that is another point of which more will be said in a moment.[22] All that needs be noted here is that in the light of these figures the prices paid for German potash by American consumers in the earlier years after the War did not contain a very wide margin of profit.

The same cannot be said of the French salts. On these the profit margins ranged all the way from 9.09 per cent to 66.04 per cent. For fertilizer salts (30 per cent K_2O) the French costs were about a third less than the German and the profit margin was 54.83 per cent as against 11.57 per cent. For chloride the French costs were likewise about a third less, and the profit margin was 66.04 per cent as against 9.9 per cent for the German.[23] So far as they go, these figures appear to bear out what was said earlier; namely, that the effect of the Franco-German

[22] See pp. 113-14.

[23] The French costs, in American money, were lower than the German in spite of a higher wage scale, thinner deposits, and somewhat greater average depth of mines. In part these lower costs were owing to the depreciation of the franc; in part to the freedom of the French mines from the burden of a large investment in closed-down mines, as contrasted with the German. But in large measure, also, they were owing to the fact that the French salts are much higher in average potash content than the German (16.7 per cent as against 11.2). Only 30 per cent of the French salts were subjected to the expensive refining process as against 80 per cent of the German. Absence of magnesium salts in the French mines also tended to reduce the cost of refining. These latter are, of course, basic natural advantages of a relatively permanent character.

agreement has been to check severe competition from the French and thus to maintain a higher level of prices than would otherwise prevail.

During the past few years the margin of profit per unit appears to have increased. The foregoing figures are based on the years 1923 and 1924. Prices of potash have since risen; and the rise appears to have exceeded the increase in costs. The following table shows the rise of prices after 1923-1924; also

PRE-WAR AND POST-WAR PRICES OF POTASH, C. I. F. AMERICAN ATLANTIC PORTS [a]

(In dollars per short ton)

Period	Muriate of Potash [b]	Sulphate of Potash [b]	Manure Salts [c]	Kainite [d]
1910–14	37.69	45.73	13.14	8.12
1921	52.50	72.46	15.33	9.63
1922	33.60	43.40	10.15	6.91
1923	31.42	40.14	9.47	6.50
1924	31.10	41.26	9.43	6.58
1925	31.19	41.26	9.67	6.84
1926	31.60	41.44	10.60	7.46
1927	33.82	43.95	11.52	8.36
1928	35.34	45.92	12.04	8.74
1924 as a percentage of 1910–14	*83*	*90*	*72*	*81*
1928 as a percentage of 1910–14	*94*	*100*	*92*	*108*
1928 as a percentage of 1924	*114*	*111*	*138*	*133*

[a] Prices as published by the *N. Y. Potash Export My.*, the Dutch company which acts as the New York sales agency of the international potash combine. See pamphlet entitled *Fertilizer Economics*, Vol. I, No. 6, March, 1929, p. 20.

[b] In bags.

[c] 20% K_2O. In bulk.

[d] 12.4% K_2O. In bulk.

a comparison of post-war with pre-war figures. The prices quoted are list prices c. i. f. American Atlantic ports, minus discounts.[24]

Prices reached their lowest level in 1923-24. Between 1924 and 1928 they increased by as little as 11 per cent in the case of sulphate and by as much as 33 per cent in the case of manure salts. In 1924 the index number for all potash, based on 1910-1914 as 100, stood at 81.[25] In 1928 it was 97—an increase of about 20 per cent. How far the increase may be attributed to the formation of the Franco-German combine in 1924 cannot be told; but it is perhaps more than a coincidence that prices reached their lowest point just prior to its formation and have been rising since.

Especially would the foregoing rise of prices be significant if there were no corresponding increase in costs. Enough evidence is available to indicate

[24] The discounts now offered are arranged according to the season of the year at which the potash is bought, and the result is a sliding scale of net prices very similar to the seasonal scale of nitrate prices as explained on page 37. The discounts run from 8 per cent for orders placed prior to June 5 for prompt shipment, and 7 per cent for orders placed prior to July 1 for July shipment, down to 2 per cent for orders prior to December 1 for December shipment. No discount is offered for shipment in the spring when the fertilizer manufacturers and distributors can do the heaviest business with the least expense for storage.

[25] *Fertilizer Economics*, Vol. I, No. 6, March, 1929, p. 19. The index is weighted on the basis of the average quantities of the respective potash salts imported for the 36 months July, 1911, to June, 1914, inclusive. See *Farm Economics* (published by the New York State College of Agriculture, Cornell University), No. 42, February, 1927, p. 622, footnote 2.

with reasonable certainty that there was not. It is true that some items of cost have increased and that the increases in prices granted by the Potash Council have been in response to petitions alleging large net increases.[26] Opposing interests have contended, however, that the figures submitted by the syndicate have been too high; and examination of the changes that have occurred in the various items of cost appears to support their position.

The available data indicate that there has been a marked increase in capital charges and some increase in transportation costs since 1924, but that in spite of increases in wages, there has been a very considerable decline in labor costs per unit and, up to 1926 at least, in other mining costs. Estimates published by the Bureau of Mines, disclosing the changes between 1924 and 1926 in the German costs of mining potash and refining it into marketable forms, are given in the table on page 108.

These figures show that between 1924 and 1926 there was considerable reduction in all the minor items of expense, but a slight increase in labor costs and a marked increase in capital charges as indicated jointly by amortization and interest on foreign loans; so that, in sum, there was a slight increase in total costs.

[26] In 1926, for example, increases in German domestic prices of the lower grade salts ranging all the way from 13.2 per cent for fertilizer salts (40-42 per cent K_2O) to 27.9 per cent for carnallite, were granted by the Potash Council in response to petitions for an 18 per cent increase in prices, supported by allegations of increased costs. See *Mineral Industry*, edited by Roush and Butts, Vol. 35, 1926, p. 556.

ESTIMATED AVERAGE COSTS OF PRODUCING POTASH IN GERMANY, 1924 AND 1926 [a]

(In cents per unit of 20 pounds of K_2O)

Item	1924	1926
Labor	8.97	9.20
Power	2.36	2.15
Fuel	3.55	3.25
Supplies	4.44	3.90
Amortization	7.24	7.00
Interest on foreign loans	...	2.60
General expenses	2.94	2.15
Total cost	29.50	30.25

[a] U. S. Bureau of Mines, *Bulletin* No. 274, pp. 77 and 82.

The increase in capital charges is the result of interest at 7 per cent on foreign loans amounting to 12,000,000 pounds sterling that were contracted in 1925 and 1926. These obligations were incurred in financing the reorganization, the "rationalization," of the industry; and the interest on them may therefore be regarded as a rough measure of the increased capital charges involved in putting the industry on a more efficient basis.

We should naturally expect increased efficiency to be reflected in reduced labor costs. Up to 1926, however, while it may have reduced some of the minor costs, the reorganization had apparently not increased the productivity of labor enough to offset an increase of about 7 per cent [27] in wages. Hence

[27] U. S. Bureau of Mines, *Bulletin* No. 274, p. 82.

labor costs per unit increased somewhat. But later figures tell a different story.

The following table shows the annual sales of potash, in terms of potash content, since 1924 and the sum total of wages paid annually to workers in the industry. For comparison with pre-war cost we include also the year 1913. From these two items we have derived the average annual labor cost per unit of potash sold.

LABOR COST IN THE GERMAN POTASH INDUSTRY, 1913 AND 1924-1927 [a]

Year	Total Sales (In metric quintals of K_2O)	Total Wages Paid (In reichsmarks)	Labor Cost (In reichsmarks per metric quintal)	Index of Labor Cost per Unit (1913=100)
1913.....	11,104,000	44,638,944	4.02	100
1924.....	8,420,000	30,161,103	3.58	89.1
1925.....	12,255,117	43,350,057	3.54	88.1
1926.....	10,998,733	39,923,403	3.63	90.3
1927.....	12,393,722	36,083,528	2.91	72.4
1928.....	14,242,000	...	...	...

[a] *Arbeit* (Official Journal of the German Federation of Free [Trade] Unions), July, 1928, p. 423. This source does not show the wages paid in any year prior to 1924 except 1913.

A striking feature of this table is, of course, the decline in post-war as compared with pre-war labor costs per unit. But in the present connection the important feature is the large reduction in this item in 1927—a decline of 0.72 reichsmarks or about 20 per cent from the 1926 figure. The large increase in

sales in 1928, as shown in the table, suggests the probability of a further decline in unit labor costs; and the figures that we are now about to introduce indicate that there was, in fact, some decline.

The report of a special committee appointed by the Reichstag to inquire into conditions in the potash industry has recently been published. The following table shows the findings of the committee as to the trend of costs since 1926. For reasons that we need not go into, the total cost for 1926 does not check with that given by the United States Bureau of Mines as given above. But, according to the committee, the data represent a considerable, and what was believed to be a characteristic, part of the industry. And they serve to show the trend.

COSTS OF PRODUCTION OF POTASH IN GERMANY, 1926, 1927, AND 1928 [a]

(In reichsmarks per metric quintal)

Item	1926	1927	1928
Wages	3.61	3.22	3.20
Salaries	1.07	0.92	0.96
Workers' benefits	0.62	0.61	0.60
Cost of materials	3.34	3.13	2.95
Other operating costs	0.70	0.60	0.50
Interest	1.90	1.32	1.12
Administrative expenses	0.73	0.63	0.50
Taxes	0.71	0.59	0.64
Compensation for quotas	1.00	0.80	0.70
Depreciation	2.79	2.79	2.79
Total cost	17.13	14.45	13.48

[a] *Der Deutsche Volkswirt*, September, 1929.

There are some items in the table, such as the inclusion of compensation for quotas, concerning which a question might be raised. But they do not alter seriously the broad significance of the figures. Almost every element of cost has been reduced—capital charges, materials, administrative expense, and (in spite of liberal increases in wages) even labor costs. In 1928 the average cost per unit was only 78 per cent of what it had been in 1926.

The foregoing data, though discontinuous and somewhat fragmentary, leave no room for doubt as to the broad trend of mining costs since 1924. For a time the increased efficiency in production was largely offset by the increased capital charges and by the heavy writing off of depreciation that resulted from reorganization of the industry. But with the subsequent increase in volume of sales, in an industry where total costs are—as the Reichstag committee found—in large measure independent of volume of output, a decline in unit costs was inevitable.[28]

There remain for consideration costs of transportation and marketing. As to the trend of the latter,

[28] As to costs in the French industry we have no information beyond 1926. According to the estimate of the U. S. Bureau of Mines, "Potash Mining in Germany and France," *Bulletin* No. 274, pp. 81 and 83, mining costs increased from 2.72 francs per unit of 20 pounds of K_2O in 1923 to 3.23 francs in 1926. In the main the increase was attributable to marked increases in wages and costs of materials. But owing to the decline of the franc from 6.08 to 3.24 cents, costs in American money diminished from 15 cents per unit to 9.6 cents. Since 1926, however, the franc has been stabilized and it is probable, therefore, that costs in American money have risen.

we have no information; but such costs are not large enough in any case greatly to affect the results.[29] As regards transportation there appears to have been a considerable increase in inland freight charges and some increase in ocean-carrying charges since 1924.[30] But except on the crude salts, of relatively low value, the increases that have occurred are too small a proportion of total cost to account for more than a minor part of the substantial increase in prices. As we have seen (page 106), it is on the crude salts that the percentage of increase in prices has been greatest. Certainly there has been no increase in costs of transportation and marketing sufficient to offset the decline in mining costs; and as prices in the United States are higher than they were in 1924, it follows that the margin of profit (at least on

[29] *Ibid.*, p. 86.

[30] Precise information as to the movement of transportation costs is extremely difficult to obtain, but enough is available to indicate an upward trend. According to the *Statistische Jahrbuch für das Deutsche Reich*, the rate on kainite from Hamburg to New York increased from 12.6 reichsmarks per metric ton in 1924 to 14.7 reichsmarks in 1927—an increase of about 17 per cent. No quotations are given on the other salts. Figures furnished by the U. S. Shipping Board show increases, on the relatively small part of the imports handled by its vessels, as follows between 1924 and 1928: kainite, from $3.00 a metric ton to $3.25-$3.75; fertilizer salts, from $3.00-$3.50 to $3.25-$4.00; chloride or muriate of potash, $3.50, with no increase. These data are only fragmentary, but they indicate increases which would tend to bear heavily on the cruder salts. According to the U. S. Bureau of Mines (*Bulletin* No. 274, p. 86), inland freight (Germany) on kainite was, in 1924, $1.93 a metric ton. A quotation obtained for 1928 places it at $2.38 a metric ton—an increase of about 23 per cent.

American sales) is considerably wider than it was at that time.

That the profit margin on American sales has been considerably wider of late than it was a few years ago does not, of course, prove that it has been equally wide on domestic sales. Nor does it necessarily indicate that the margin is wider, that prices are higher, than would be necessary in order to enable the German industry to earn a fair return on its investment.

The question that now arises, therefore, is as to the rate of return that the industry has been earning. If this has been substantial, the supposition is that the margin of profit on all sales, domestic and foreign, has been considerable, since approximately two-thirds of the sales have been to domestic consumers.

In 1928 the German potash industry earned a profit of somewhere between 12 and 22 per cent on its estimated total investment. This is the conclusion reached in the recent official report of the Reichstag committee of inquiry into the potash industry.[31] The committee estimated total proceeds of the industry in 1928, including receipts from by-products, to be approximately 246 million, and total expenses approximately 192 million, reichsmarks; so that there was a profit (without deducting the corporation tax) of 54.6 million reichsmarks. On the basis of study of fire insurance and replacement values the committee concluded that the total investment in the industry amounted to from 600 to 700

[31] As quoted by Dr. Georg Katona in *Der Deutsche Volkswirt*, September, 1929.

million reichsmarks. From these figures, however, it was necessary to deduct the long-term British loan of 250 million reichsmarks already included in costs, thus leaving an estimated net investment of from 350 to 450 million reichsmarks. Based on these figures, the average rate of earning in 1928 works out somewhere between 12.1 and 21.8 per cent.[32]

These are broad limits; yet they throw some light on the situation. They leave no doubt that the industry has recently been making an excellent return on its investment. There may be some competitive industries that show even higher earnings. But the average rate of return for competitive industry is considerably lower. The average net profit on capital invested in corporations in Germany was 5.76 per cent in 1926 and 7.52 per cent in 1927.[33] Considering further that the element of risk in the potash industry is reduced by the monopolistic organization fostered, and participated in, by the government, average earnings of from 12 to 22 per cent must be regarded as high. If they have not been high enough to prevent expansion in the volume of sales, they have nevertheless been higher than necessary to enable the industry to earn a fair return on its investment.

[32] According to the committee's finding the industry had suffered an actual loss of 12.4 million marks in 1926, but earned a profit of 27.9 million in 1927. In these earlier years the benefits of rationalization had been only partially felt. It was not until 1928, when the volume of sales reached 90 per cent of the capacity of the industry, that anything like the full extent of the gain from rationalization was realized.

[33] Germany, National Statistical Office, *Wirtschaft und Statistik*, August, 1928, p. 558.

With regard to the rate of earnings in the French potash industry no information is available, so far as we have been able to ascertain.

There remains one further point regarding prices and profits. It has long been contended that the German syndicate has regularly discriminated in favor of domestic consumers by charging them lower prices than those charged to foreign consumers. If this were true, there would presumably be some point, lower than the foreign price and higher than the domestic, at which, if discrimination were abolished, a uniform price might be charged which would enable the industry to earn the same return on its investment as it has in fact been earning.[34] That is to say, if price discrimination has in fact prevailed, the actual rate of earnings of the industry does not tell the whole story. For it does not indicate how much lower, if discrimination had not prevailed, the prices charged to foreigners might have been without lowering the total earnings of the industry. It is important, therefore, to know whether such discrimination has in fact existed, even though we may not be able to

[34] The only exception would be in case the discriminatory prices charged were, in each instance, optimum prices. In that case, either a reduction of the foreign or an increase of the domestic price would tend to reduce the earnings of the industry. In fact, however, it seems certain that the prices charged to domestic consumers are not optimum prices, since the influence of the government has been definitely exerted in the direction of making prices to German farmers more reasonable than they would be in the absence of government intervention.

measure its precise amount or its precise effect on earnings.

For many years there was marked price discrimination in favor of German consumers, but there is apparently not much discrimination at present. The amount of discrimination has always been difficult to measure, owing partly to the different bases on which prices have been quoted and partly to the fact that it has varied on the different salts from time to time and even from one country to another. But there is no doubt that for many years discrimination was continuous and substantial.

From 1899 to 1910 the prices for 20 per cent manure salts to Germans, to Austrians, and to foreigners other than Austrians were respectively 3.10, 4.10, and 4.70 marks per 100 kilograms. For 30 per cent salts, the prices were 4.75, 6.00 and 6.90, respectively.[35] For 40 per cent salts there was what is described as a particularly "favorable" price for domestic consumers, but these salts were not shipped to the United States. The foreign quotations just given include sacks; the domestic do not. But the sacks doubtless were re-used or had a resale value; so that this difference can account for only a part of the difference in price. For the crude salts, carnallite, kainite, and sylvinite, the differences in prices were somewhat smaller and more varied. For carnallite, from 1889 to 1909, the inland price was 0.90 mark per 100 kilograms; the foreign price, one-third greater. For kainite the domestic price during

[35] Krische, *Das Kali*, I, 147-49.

the same period was 1.50 marks per kilogram, except during a brief price war,[36] while the foreign prices were 1.65 to 1.90. In respect to refined salts, however, there was no price discrimination; so that the German fertilizer and refining industries as well as the farmers were favored by the lower prices charged at home for the cruder salts.

Does price discrimination still prevail? On this point the available data are far from satisfactory. There is no doubt that the gap between foreign and domestic prices is much narrower than before the War. After the increase of prices in 1926, domestic prices averaged 113.4 per cent of the 1913 average, whereas export prices were left only slightly higher than in 1913.[37] But whether, after allowing for freight and other costs of marketing, some measure of discrimination still persists, is uncertain. Data which we have assembled, based on the period 1927-28, suggest, but do not prove, the existence of some discrimination through that period.

The table on page 118 shows the results of an attempt to compare American and German domestic prices of potash in 1927-28 and by allowing for marketing costs to determine whether there was price discrimination.

We have endeavored to compare actual list prices of various salts, c. i. f. Atlantic ports, with a derived

[36] The prices of crude salts are for bulk sales, without sacks. The price of kainite to Austria-Hungary was 1.55. In 1905-06 sales to the United States, France, Belgium, and Holland were made at the domestic price. *Ibid.*

[37] Dr. Katona, in *Der Deutsche Volkswirt*, September, 1929.

COMPARISON OF GERMAN PRICES OF POTASH SALTS FOR DOMESTIC CONSUMPTION WITH PRICES FOR THE AMERICAN MARKET IN 1927-28

(All figures in dollars per metric ton)

Item	Kainite		Manure Salts		Muriate (50% K_2O)	Sulphate (48% K_2O)	Sulphate of Potash Magnesia (26% K_2O)
	12.4% K_2O	14% K_2O	20% K_2O	30% K_2O			
German domestic price, f.o.b. freight base (in bulk) [a]	3.20	3.61	7.24	12.83	32.16	35.73	17.87
Inland transportation [b]	2.38	2.38	2.38	2.38	2.38	2.38	2.38
Ocean transportation [b]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Marketing costs [c]	.45 [d]	.45	.67	1.00	1.67	1.10 [e]	1.67 [f]
Total hypothetical price, c.i.f. American Atlantic ports	9.03	9.44	13.29	19.21	39.21	42.21	24.92
Actual c.i.f. price, American Atlantic ports (in bulk)	9.92	10.47	13.67	20.67	38.36	50.38	28.27
Excess of actual over hypothetical price	.89	1.03	.38	1.46	—.85	8.17	3.35

[a] Prices as fixed on December 23, 1926 and prevailing through 1928. U. S. Department of Commerce, "German Chemical Developments in 1928," *Trade Information Bulletin* No. 605, p. 20.

[b] Information furnished by Chemical Division, U. S. Department of Commerce.

[c] U. S. Bureau of Mines, *Bulletin* No. 274, p. 86. These figures are for 1924. No later data are available. Figures are adjusted from short to metric ton basis.

[d] No cost given. Figure used is that for 14% kainite.

[e] Figure given is that for 53% sulphate of potash. [f] Figure given is for 50% muriate.

price arrived at by adding to the German domestic price (for the home market) shipping and marketing costs from German inland freight points to American Atlantic ports. The figures admittedly contain serious deficiencies. Transportation costs have fluctuated considerably with shifts in competition for the ocean carrying trade and are therefore somewhat uncertain. Marketing costs as given are for an earlier year. Both German and foreign prices include discounts which may not offset each other in amount; but information on this point is not sufficient to permit adjustment to a net price basis.[38]

The figures indicate an excess of the foreign over the adjusted domestic price, for all salts except muriate.[39] For kainite the margin is in the neighborhood of 10 per cent; for manure salts, about 3 per cent in respect to 20 per cent salts, and 7 per cent in respect to 30 per cent salts; for sulphate, 16 per cent; for sulphate of potash magnesia, 12

[38] In the article already referred to above (in *Der Deutsche Volkswirt*, September, 1929), Dr. Katona points out that the syndicate sells only to dealers, co-operatives, and fertilizer manufacturers; that various rebates are granted on domestic sales according to quantities bought; that the highest (fifth) rebate, which is double the lowest, is reached by only three organizations; but that these take about 80 per cent of the domestic sales. Whether these rebates exceed those allowed in the foreign trade and thus tend to conceal price discrimination beyond that shown in the foregoing table we cannot tell from the available data.

[39] The apparently lower foreign than domestic price of muriate (bulk) presumably indicates an error in the figures at some point, since such discrimination against domestic consumers would be in violation of the law.

per cent.[40] Account should be taken, however, of the relative amounts of these different salts that are imported. In terms of pure potash content, imports of kainite in 1927 constituted 7.2 per cent of all imports; manure salts, 33.2 per cent; muriates, 42.4 per cent; and sulphate, 17.2 per cent. In 1928 the corresponding figures were 5.4, 35.1, 43.9, and 15.6 per cent. Of the imports of manure salts in 1928, it is estimated that 20.6 per cent were 20 per cent salts, 13.2 per cent were 30 per cent salts, and 1.3 per cent were sulphate of potash magnesia.[41] It thus appears that on the largest single item (muriate) there is no price discrimination. On the others—constituting between 50 and 60 per cent of the total—there may be some, but the amounts indicated above are easily within the margin of possible error.

So far as we can tell from the available data it does not appear, therefore, that there is very much price discrimination at the present time. Discrimination may, of course, prevail in forms more subtle

[40] Another comparison, in which we have used a somewhat different German domestic price series taken from *Landwirtschaftliches Genossenschaftsblatt*, for January 15, 1927, results in a wider margin for the cruder salts and a narrower for the finer. The excess, in dollars per metric ton, of American over adjusted German prices, if we interpolate certain differentials from the foregoing table, is as follows: kainite, 12.4 per cent K_2O, $1.14; 14 per cent K_2O, $1.31; manure salts, 20 per cent K_2O, 95 cents; 30 per cent K_2O, $3.93; muriate, 50 per cent K_2O, 85 cents; sulphate, 48 per cent K_2O, $3.88; sulphate of potash magnesia, $2.02. In part the difference may be attributable to the use of a different freight base for quotation.

[41] Data on imports furnished by the U. S. Bureau of Mines.

than are revealed in mere price comparisons such as the foregoing—in discriminatory rebates, for example, or in disproportionately high prices on the finer salts, a larger proportion of which is sold abroad than at home. An attempt to determine whether in fact such discrimination does prevail would require extended inquiry and might lead to no definite conclusion. This much, however, is certain: discrimination between the domestic and foreign markets plays a much less important part in the price policy of the syndicate than it did before the War.

CHAPTER V

BRAZILIAN VALORIZATION AND CONTROL OF COFFEE

A second illustration of control of supplies by the state in behalf of the producers is afforded by Brazil's experience in the valorization of her coffee supplies. This practice, whereby the state endeavors to regulate prices by buying up a part of the existing supply and withdrawing it from the market, has been resorted to more conspicuously and more successfully by Brazil than by any other country. The intervention of the state and federal governments of Brazil in the production and marketing of coffee does not go back so far as the Prussian and German participation in restricting the output of potash, but it is in some respects a more instructive illustration of the policy. It represents an attempt to deal with two distinct and difficult problems of supply. One, similar to that which arises in the case of rubber (see Chapter VI), is the problem of adjusting supply to demand for a crop which comes into bearing only after six or seven years. The other, not unlike that which occurs with cotton, is the problem of stabilizing prices for a crop which fluctuates markedly from year to year.

The attempts of Brazil to cope with these difficulties through the active intervention of the gov-

ernment date from 1905. The two decades that followed were marked by three distinct experiences with valorization as a means of stabilizing and bolstering prices. The first began in 1905 and lasted, if we include the long period of gradual disposition of the surplus bought up by the government in the earlier years, until 1918; the second lasted from 1917 to 1920; and the third, from 1921 to 1923. With the successful termination of the third valorization, legislation was forthwith adopted providing for the "permanent defense" of coffee; that is, continuous manipulation of supplies and credit by the government in an effort to stabilize prices. In this system of regulation, which still continues in effect, valorization is held in reserve as a measure to be applied only in "emergencies." Nevertheless, the upshot of the earlier experiences with valorization is that control of supplies in one way or another was to become a continuous policy of the government; and a review of the whole record of Brazil in this field is therefore pertinent to the present situation. It is accordingly the purpose of this chapter to describe and to show the results of Brazil's endeavors in this field.

Brazil achieved toward the close of the nineteenth century a dominating position with respect to coffee-growing. The industry, once started, developed rapidly. It was not until the latter part of the nineteenth century that southern Brazil exploited on any considerable scale her especially favorable conditions of soil and climate. But once coffee-growing was well established, other crops gave way to such

an extent that this most fertile region, notwithstanding a sparse population, soon became an importer of foodstuffs. Production quickly came to center in the State of Sao Paulo. Since 1900 Sao Paulo has produced about three-fourths of Brazil's coffee. As Brazil furnishes two-thirds of the world output, Sao Paulo alone contributes over one-half of the world supply.

Brazil's position has been strengthened by the individuality of her coffee. The various coffee-growing regions of the world and even the different parts of Brazil produce coffees of distinct types and flavors—Bourbon Santos, Flat Bean Santos, Rio, Victoria, Bahía, and so on. But all Brazilian coffee is "strong" as distinguished from the "mild" coffee which comprises the bulk of that grown outside Brazil. Drinkers accustomed to one variety do not readily shift to another. The makers of trade-marked blends must continue the use of substantially the same varieties. The United States consumes almost 50 per cent of Brazil's coffee and obtains about two-thirds of her supplies from that country. Brazil's dominating position is therefore a matter of primary concern to the United States.

Overexpansion of the industry and financial instability in Brazil resulted in a severe depression at the close of the century. Up to 1896 the planters had found the price of coffee remunerative and they rapidly replaced corn, rice, beans, and other crops with coffee. Added to the stimulus of favorable gold prices was that of a depreciating currency. When the Emperor Dom Pedro left Brazil in 1889

the milreis, the monetary unit, was worth about 52 cents; in 1897-98 it was down to about 12 cents. The depreciation did not affect the price which the planters received for coffee. That was fixed by world conditions of supply and demand in terms of gold. It did, however, affect wages and other local costs. Wage earners were paid in milreis and their wages did not rise in proportion to the decline in value of the money in which they were paid. In brief, as depreciation progressed, the planters were constantly receiving an increasing number of milreis for a given amount of coffee while the number of milreis which they paid out for producing it was not increasing or was increasing more slowly. Hence, in common with other exporting industries, the coffee industry of Brazil profited by the depreciation of the currency.

This artificial stimulus to the production of coffee was removed near the end of the century, but by that time the damage was done. The gold price of coffee had averaged 15 or 16 cents a pound from 1886 to 1896, but the constantly increasing output brought about a slump in price. In 1897-98 the high was 7⅜ and the low was only 5½ cents per pound. Concurrently with this decline of price the milreis ceased to depreciate and even went up. The planters were doubly hit. Not only was the price in terms of gold much lower than before, but by a process the reverse of that explained in the last paragraph this lowness of price was intensified in its injurious effect on the planters by the appreciation of the milreis.

Consumption of coffee increased steadily, but not as fast as production. There was a gradual accumulation of supplies. Stocks on hand equal to 25 or 30 per cent of the previous year's consumption had been considered normal; but by the end of the century they had increased to nearly 50, and by 1902 to about 73, per cent. The climax came with the unprecedented crop of 1901-02. In that year the crop exceeded by nearly 50 per cent the record-breaking crop of the year before. Panic followed. In 1900 the New York price of Rio No. 7 had averaged 8.26 cents a pound; in 1901 it was 6.48; in 1902 and the first half of 1903 the six months' averages went down successively to 6.03, 5.51, and 5.43 cents.[1]

For several years the depression failed to provoke any effective policy of restricting production. The only governmental effort which the crisis of 1902 brought forth to check the extension of coffee acreage was tentative and futile. The State of Sao Paulo placed a prohibitive tax on any new areas put under coffee trees. This measure, nominally in effect for ten years, is said not to have been enforced.[2] The

[1] Rio No. 7 is the type of coffee quoted as a base in the New York Coffee Exchange. It is an inferior grade of which little is sold.

[2] According to Ramos, F., *The Valorization of Coffee in Brazil*, pp. 15, 36, 37, this tax did effectually prevent a great increase in the planted area between 1902 and 1906. But the low price of coffee in itself had become a deterrent to further planting; and while the number of trees in bearing increased, especially after 1912, the annual yields since 1905 give evidence that the new trees planted throughout Brazil did little more than compensate for those which reached an advanced age and bore diminished crops. Official estimates of

reduction of new planting had, of course, no immediate effect upon production or upon price. The depression continued. Mortgages on plantations were foreclosed. Many properties fell into the hands of banks and foreigners. Revolution threatened. The demand for state aid became insistent.

I. THE FIRST VALORIZATION, 1905-1918

In this state of affairs all that was needed to bring matters to a head was the prospect of another bumper crop and still lower prices. In 1905 precisely this situation developed. A vast crop was in prospect for 1906; and when collected it turned out to be larger than the famous crop of 1901-02.[3] The total for Brazil reached 20,190,000 bags, of which the territory tributary to Santos produced

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trees in bearing in Sao Paulo show that planting had almost ceased before 1900. In 1890-91, the number was 200,000,000; in 1894-95, 300,000,000; in 1900-01, 659,960,000; in 1904-05, 688,845,000; and in 1909-10, 696,701,000. (Bynum, M. L., U. S. Department of Commerce, *International Trade in Coffee*, 1926, p. 17.) Trees in bearing in Brazil in 1926 have been estimated at over 2,000,000,000, one-half of them in Sao Paulo. For a more recent, more detailed, and an exceedingly instructive account of the Brazilian industry, see McCreery, Walter G., and Bynum, Mary L., U. S. Department of Commerce, "The Coffee Industry in Brazil," *Trade Promotion Series* No. 92, 1930.

[3] The size of the coffee crop can usually be foretold with considerable accuracy almost a year in advance. In Brazil the trees begin to flower in August and September and the size of the main crop can be predicted from the abundance of the flowers. The picking of the crop is begun in May, and since the berries must be freed from the pulp, dried, and freed from the parchment before they are sold, the crop does not begin to come on the market until July. The crop year is therefore reckoned from July 1.

15,400,000 bags.[4] Meanwhile the prospect of this huge crop had already brought to a climax the agitation for state intervention.

In the latter part of 1905 the State of Sao Paulo officially adopted a policy of valorization. On October 3 the legislature authorized the executive to enter into an agreement with the federal government and with other states for supporting the price of coffee. At that time no co-operation was secured except some financial assistance from the federal government.[5] On December 29 further legislation imposed a surtax of three francs per bag upon coffee exported. The proceeds were to be used exclusively for the valorization of coffee. About the same time entries of coffee into the port of Santos were limited to 50,000 bags for each business day. This restric-

[4] A bag contains 132 pounds. The 1906-07 crop in other parts of the world was not much below normal. It was not until 1915-16 that the total production for the entire world once more attained even to the level reached by Brazil alone in 1906-07.

[5] On February 26, 1906, the States of Sao Paulo, Minas Geraes, and Rio de Janeiro signed the convention of Taubauté. By this convention they undertook to co-operate to maintain a minimum local price of 8 cents a pound for Rio No. 7. The agreement included arrangements for carrying on propaganda to increase the consumption of coffee; for bringing about improvements in the quality of the Brazilian product; and for the imposition of a surtax of 3 francs per bag to help finance the operations. On July 4 the convention was modified and among other changes the minimum price was put at 7.8 cents per pound. On August 6 the President of Brazil approved the convention with certain modifications. After this approval, however, the other two states withdrew and left Sao Paulo to attempt the valorization with her own resources.

tion would allow the entry within a year of a quantity twice as great as had entered in each of the three preceding years. It perhaps served to check the deluge, but it afforded no prospect of an actual improvement of the market. Moreover, it produced new difficulties, since the plantations lacked storage facilities and many planters lacked the credit needed to hold the crop.

The Sao Paulan government was at first financially unable to carry through the scheme successfully. The limitation of entries into Santos and the announcement of the state's entry into the market probably prevented an absolute collapse, but the government's financial difficulties prevented it from buying rapidly enough to keep a huge surplus from accumulating.[6] Beginning with the purchase of

[6] The firm of Rothschild, Brazil's bankers for decades, had refused to assist in the valorization. Sao Paulo obtained £1,000,000 from bankers and £3,000,000 from the federal government. With this start, she bought 2,000,000 bags. In August, 1906, the aid of Hermann Sielcken was secured. Mr. Sielcken, a New York coffee broker, made arrangements with 30 other merchants, American and European, for financing the withdrawal of coffee from the market. These merchants advanced money to the extent of 80 per cent of the value of the coffee shipped to them, and the State of Sao Paulo guaranteed the 20 per cent margin, 6 per cent interest, and 3 per cent commission for each year the coffee was held. This credit enabled Sao Paulo to enter the market on a large scale and by the middle of 1908 she had bought 10,868,000 bags of coffee. The stability of prices and the efforts of Mr. Sielcken at length convinced the bankers of the feasibility of the valorization scheme; and by a contract of December 11, 1908, a group of French, German, British, and American banks advanced a large loan and took over virtually all of the coffee stocks (see text, p. 131). Hermann Sielcken was one of the valorization Committee of seven which controlled the sale of the coffee.

2,000,000 bags in August, 1906, it pursued its buying policy through December, 1907,[7] and at the end of 1907 had on hand 8,146,000 bags of coffee. This quantity was actually equal to an entire average Brazilian crop before 1900. But even so it was less than the amount by which the bumper crop of 1906-07 exceeded the average of the four preceding years.

Large as was the quantity which Sao Paulo purchased, it cannot be accused of creating any shortage or of cornering the coffee supply. The visible world stocks were estimated to be 16,400,000 bags on July 1, 1907, and 16,758,000 bags on January 1, 1908, or amounts equal to some 95 per cent of the world's consumption. Available stocks equal to nearly 50 per cent of a year's consumption remained after 8,146,000 bags had been taken from the market. These stocks were, to be sure, somewhat smaller than had typically existed since the big crop of 1901-02. But they were larger than had prevailed in 1899-1901, which were years of depression; so that there was clearly no dearth of available supplies for the consuming public.

That no such shortage was created is further evident from the subsequent fall in prices. The New York price of Rio No. 7, which averaged slightly above 7 cents a pound in January-May, 1907, fell in June to 6.45, and then varied between 6 and 6.42 until it rose to 6.55 and 6.56 cents[8] in November and

[7] The state sold (some 2,750,000 bags) as well as bought in this period. Small purchases were made in the spring of 1908.

[8] These figures are monthly averages.

December. The coffee crops of Brazil and of the world in 1907-08 were about equal to those of 1903-04 and 1904-05 and did not seriously jeopardize the success of the valorization operations. But in 1908-09 the crop was much larger, and in the autumn of 1908 the successful outcome of valorization was distinctly a matter of doubt.

At this juncture the Sao Paulan government resorted to further restrictive measures. On August 25, 1908, a law was passed increasing the surtax of three francs per bag to five francs, or to about three-quarters of a cent per pound. This surtax was in addition to the regular export duty of 9 per cent. The law further provided for still an additional tax of 20 per cent upon exports in excess of 9,000,000 bags during the crop year 1908-09 and for the same additional rate upon exports in excess, respectively, of 9,500,000 and 10,000,000 bags in 1909-10 and 1910-11. The law also authorized the borrowing of 15,000,000 pounds sterling.

In 1908 the necessary foreign credit was obtained from a group of foreign bankers through a promise to restrict output and exports. In December the Sao Paulan government secured a loan of 15,000,000 pounds sterling from a group of British, French, German, and American bankers. This loan enabled the state to pay the earlier obligations incurred under the valorization policy, except for 3,000,000 pounds sterling which it had borrowed from the federal government, and put it in a position to carry its stock of surplus coffee almost indefinitely. Up to this time dealers had not been sure that Sao

Paulo would not be forced to throw its stock of coffee upon the market. As security for the loan Sao Paulo turned over to the bankers 6,843,000 bags, or practically all of its remaining stock. The contract with the bankers gave them control, with certain restrictions, over the sale of this coffee, but the proceeds were to be turned over to the state. The bankers' contract enjoined or confirmed three restrictive measures on the part of the state. Sao Paulo was required to enforce the existing restriction on the planting of coffee trees and to pledge the continuance of the five-franc surtax and of the special tax upon what were deemed excessive exports from Santos.

In April, 1909, the bankers' Committee approved a suggestion of the government of Sao Paulo, that a tax of 10 per cent *payable in kind* should be levied upon exports of coffee and the coffee so secured should be dumped into the ocean, but the proposal was never carried out. The lowest grades of coffee were to be selected for destruction. The price of Rio No. 7 in New York had risen from 6⅞ cents on January 1, 1909, to a maximum for the year 1908-09 of 8⅜ cents in March, 1909. It fell to 7¾ cents on July 1, and 7⅛ cents in September, which was low for the year 1909-10. It recovered and reached 8¾ cents in January, 1910. This higher price, compared with prices during 1907 and 1908, may account for the dropping of the proposal after its approval.

Under the agreement with the bankers sales were controlled by a committee composed of one repre-

sentative of Sao Paulo and six representatives of the bankers. The Committee was authorized to sell, annually, increasing quantities of not less than 500,000, 600,000, and 700,000 bags, at prices not less than the equivalent of 8.246 cents per pound for good average Havre coffee.[9] The Committee might exceed the amounts named if it considered that the state of the market justified such sales.

The bankers' loan was paid off in 1914, but the last of the valorized coffee was not disposed of by Sao Paulo until 1918. With the payment of the loan of 15,000,000 pounds sterling in 1914 the Sao Paulan government resumed control of the remaining 3,142,000 bags of coffee. This coffee was stored in Europe. Hamburg, Bremen, and Antwerp held about two-thirds of it; and this Germany acquired early in the War by purchase or seizure. Little of that remaining in the control of the Sao Paulan government was sold in 1914-1917 while prices were low. But in 1918, before prices had much improved, nearly 1,000,000 bags were sold—perhaps because the second valorization was already under way. This practically completed the sale of the coffee purchased in 1906-1908. The Peace Conference finally awarded to Brazil 120,000,000 gold marks, with interest, for the coffee which Germany had seized.

The first valorization, together with the restrictive measures that accompanied it, unquestionably bene-

[9] Good average Havre is slightly better than Rio No. 7. The price quoted would be equivalent to about 7.85 cents a pound for Rio No. 7.

fited Brazilian coffee growers and possibly, in the long run, American consumers. In all of its dealings with the coffee situation the State of Sao Paulo had in view two main objectives: first and foremost to save its chief industry from immediate ruin and thereafter to promote its prosperity, and second to discourage the further planting of coffee trees with a view to bringing about a greater diversity in its agriculture. The tax on new plantings[10] was designed primarily to further the second objective, though indirectly also the first. Its ultimate effect should be to decrease the output of coffee and thereby improve its price. But as a coffee tree does not come into bearing for some seven years, this measure could have no immediate effect on price. The success of the government in promoting diversity in its agriculture will be taken up later for discussion. For the present we shall confine our attention to the effect of all the government measures just described on the price of coffee.

It is impossible completely to isolate the effects of these measures from those of other factors affecting price. The other factors which must be taken into account are supply conditions as evidenced by Brazilian and world crops and by holdover stocks; demand conditions varying with changes in population, with the closing of markets during the War and the opening of them after the War; changes in the purchasing power of money as indicated by

[10] The tax did not apply to plantings which were simply to replace old trees.

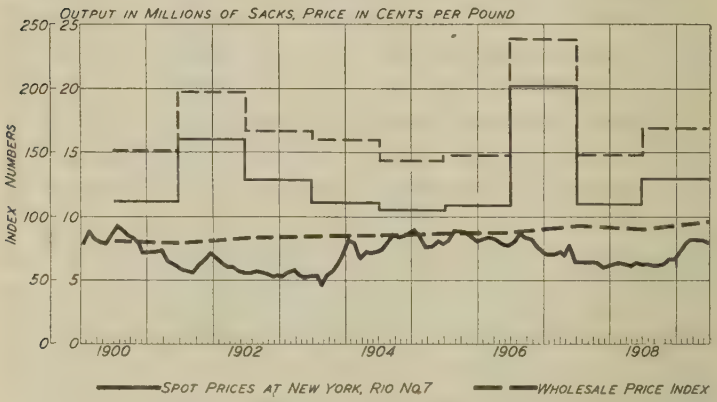
SPOT PRICES OF RIO NO. 7 IN NEW YORK BY MONTHLY AVERAGES, 1900-1929 [a]
(In cents per pound)

Year	Jan.	Feb.	Mar.	April	May	June	6 Month Average	July	Aug.	Sept.	Oct.	Nov.	Dec.	6 Month Average	Yearly Average
1900	7.82	8.75	8.25	7.94	7.90	8.50	8 19	9.19	8.89	8.52	8.29	7.94	7.17	8.33	8.26
1901	7.15	7.19	7.34	6.46	6.32	6.11	6.76	5.82	5.66	5.58	6.25	6.72	7.13	6.19	6.48
1902	6.69	6.27	6.00	5.96	5.73	5.55	6.03	5.57	5.70	5.57	5.53	5.34	5.37	5.51	5.77
1903	5.30	5.62	5.79	5.37	5.25	5.26	5.43	5 30	4.53	5.36	5.70	6 34	7.06	5.72	5.58
1904	8.06	7.89	6.69	7.22	7.07	7.16	7.35	7.37	8.03	8.49	8.44	8.51	8.72	8.26	7.80
1905	8.91	8.36	7.58	7.64	8.01	7.76	8.04	8.09	8.79	8.80	8.66	8.29	8.09	8.45	8.24
1906	8.29	8.40	8.29	8.08	7.84	7.67	8.10	7.96	8.67	8.33	8.16	7.59	7.17	7.98	8.04
1907	6.98	7.04	7.19	6.86	7.65	6.35	7.01	6.39	6.37	6.42	6.32	6.00	6.06	6.26	6.64
1908	6 19	6 31	6 19	6.06	6 34	6.24	6.22	6.19	6.11	6.06	6 23	6.55	6.56	6.28	6.25
1909	7.25	7.86	8.21	8.19	8.25	8.08	7.97	7.56	7.35	7.31	7.89	8.20	8.59	7.82	7.90
1910	8.69	8.75	8.81	8.63	8.34	8.24	8.58	8.52	9.33	10.73	10.84	12.11	13.47	10.83	9.70
1911	13.46	12 69	12.31	12.03	12.14	12.56	12.53	13.42	13.29	13.73	15.46	15.20	14.64	14.29	13.41
1912	14.12	14.28	14.53	14.64	14.25	14.41	14.37	14.45	14.08	14.72	14.95	14.86	14.20	14.54	14.46
1913	13.78	13.20	12.03	11.80	11.48	10.17	12.08	9.50	9.22	9.36	10.83	10.05	9.46	9.74	10.91
1914	9.44	9.44	8.89	8.94	8.78	9.18	9.11	8.88	8.94	7.04	6.28	6.31	7.28	7.45	8.28
1915	7.70	8.45	7.81	8.00	7.52	7.23	7.78	7.41	7.10	6.69	7.13	7.68	7.63	7.27	7.53
1916	7.91	8 96	9.53	9.69	9 80	9.44	9.22	9.22	9.60	9.91	9.50	9.31	9.44	9.50	9.36
1917	9.93	9.97	9.63	9 91	10.23	10.38	10.00	9 30	9 13	9.00	8 29	7.67	7.77	8.53	9.27
1918	8 60	8 50	8.91	9.09	8.70	8.45	8.71	8.58	8.50	9.55	10.38	10.69	17.25	10.82	9.77
1919	15.47	15.30	16.02	16.74	19.20	21.59	17.39	22.83	22.03	16.88	16.16	16.88	15.08	16.84	17.01
1920	16.44	14.77	14.99	15.25	15.56	15.08	15.35	13.19	9.54	8.17	7.50	7.54	6.72	8.78	12.06
1921	6.50	6.72	6 29	6.05	6.03	6.77	6.39	6.44	7.14	7 94	8 13	8.80	9.31	7.96	7.17
1922	9.06	8 98	9.50	10.77	11.02	10.98	10.05	10.33	10.00	10.25	10.01	10.78	11.08	10.41	10.23
1923	11 79	13.00	13 02	11.59	11.56	11.64	12.10	10.95	10.72	10.66	11.09	11.00	11.00	10.90	11.50
1924	10.88	14.03	15.04	15.35	14.89	14.48	14.21	16.46	16.66	17.64	20.19	22.91	22.18	19.34	16.78
1925	23.50	22.38	21.35	20.28	18.72	21.35	21.26	19.78	20.56	21.30	19.47	18.61	17.05	19.54	20.36
1926	18.55	19.11	18.30	18.24	19.80	20.04	19.01	19.81	19.16	17.83	16.02	16.28	15.24	17.39	18.20
1927	15.33	14.92	15.80	16.16	15.48	15.00	15.45	14.27	14.03	13.33	14.53	14.63	14.25	14.51	14.81
1928	14.80	15.50	16.70	15.40	15.70	15.70	15.63	16.50	17.30	17.30	17.80	18.10	18.10	17.52	16.50
1929	18.30	18.40	18.00	17 60	17.10	16 80	17.70	16 30	16.10	15 80	13 90	11 60	9.90	13 63	15.82

[a] Compiled from *Journal of Commerce* (New York) and published through the courtesy of the U. S. Department of Commerce.

general index numbers of prices; and finally, alternating periods of general business activity and depression. The influence of any one factor cannot be mathematically segregated from that of the

PRICES AND "OUTPUT"



[a] In endeavoring to show output we have been compelled
figures, as given in the table on p. 166. The figures under
countries. Because of valorization they tend also to under

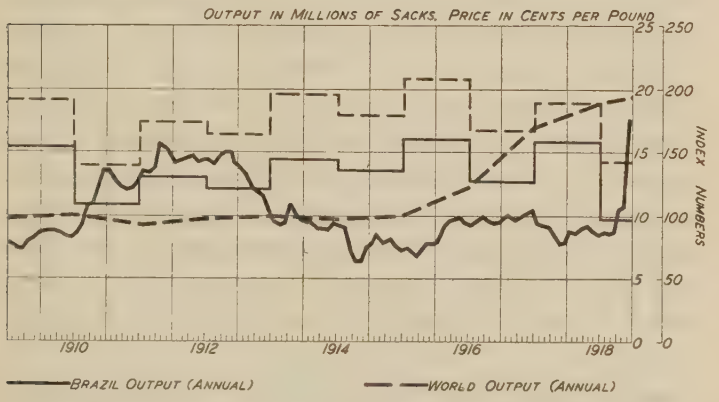
others. Nevertheless, by the aid of the table on page 135 and the charts on pages 136-37 and 146-47 it is possible to form a fairly definite judgment as to the part played by valorization and other restrictive measures in determining price movements between 1905 and 1920. The data go back to 1900.

Up to 1906 the behavior of prices was about what would be expected from changes in output. The decline anticipating [11] and following the big crop of

[11] The effect of a big or a small crop on price is likely to anticipate the actual harvesting because of the possibility of estimating the size of the crop from the flowering.

1901 and the subsequent rise accompanying decreasing crops were perfectly normal. The steadiness of price from 1905 to 1909, however, can be accounted for only by valorization. If we deduct the valorized

OF COFFEE, 1900-1918 [a]



to use what are substantially world and Brazilian export state production by the amounts consumed in producing state the fluctuations in size of crop from year to year.

coffee from the enormous crop of 1906 the quantity left on the market is still somewhat in excess of either the preceding or the succeeding crop. Hence the moderate decline in price in 1906 and 1907 is easily accounted for. If the full amount of the 1906 crop had been thrown on the market the decline in price in these years undoubtedly would have been very much greater.

After 1908 no more coffee was purchased by the government until the second valorization in 1917. During the years from 1908 to 1918 the valorized

coffee was marketed, though with great caution and in driblets.[12] During these years, therefore, valorization proper could not have been responsible for any increase in price. If it had any effect at all it would have been to depress the price. Yet from the beginning of 1909 the price did in fact rise from about 6.5 cents to a peak of 15.5 cents in November, 1911, and continued high through 1912. The high prices of these years cannot be accounted for by small crops or by any marked strengthening of demand. The rise began in 1909 and was accompanied by a crop nearly equal to the bumper crop of 1901. True, there was a drop in output in 1910 and this may have been in part responsible for the rise, but the rise continued in 1911 in spite of an

[12] The committee of seven handling the valorized coffee carefully regulated sales with a view to obtaining the best possible price and minimizing the depressing effect of sales on the market. The coffee was disposed of very gradually in private sales instead of being thrown on the exchange. The sales were made in the spring when the preceding year's crop was nearly disposed of. The greatest amount of coffee held at any one time was 8,474,623 bags at the beginning of 1908; 7,096,372 bags remained in the summer of 1909; 6,300,000 in the fall of 1910; 4,400,000 in the spring of 1912; and 3,142,000 in the summer of 1914 when the bankers' loan was paid. This remnant was disposed of by the State of Sao Paulo before the end of 1918.

The state's contract with the bankers in December, 1908, authorized the sale of its coffee at a minimum price of 8.246 cents per pound, a price which represented little or no profit even if the coffee were sold within a year or two, and if the coffee were held for several years, the stipulated price offered no hope of covering the original price and carrying charges. The contract also contemplated minimum sales which might spread the sale of the total over a period of ten years.

increase of over two million bags in output. The crop of 1910-11 which was accompanied by an average price of 11.7 cents was therefore as large as many preceding crops which had been accompanied by prices of from 7 to 8 cents. Demand conditions were, of course, improving with growing population, but there is no reason for supposing any phenomenal strengthening of demand. Nor is there a sufficient change in the purchasing power of money as indicated by index numbers to warrant the high prices.

There seems little reason to doubt that in some manner the restrictive measures that accompanied valorization contributed to the rise of prices in this period. It is true that the restrictions enjoined by the bankers upon the planting of coffee trees are alleged to have been observed even less than formerly; but in any case they could have had but little effect on supplies in 1911 and 1912. What clearly did happen, however, was a very considerable withholding of supplies in Brazil, as is disclosed in

STOCKS OF COFFEE ON HAND AT SANTOS, 1901-1918 [a]
(As of July 1)

Year	Bags	Year	Bags	Year	Bags
1901.....	832,030	1907.....	702,414	1913.....	608,356
1902.....	640,760	1908.....	858,868	1914.....	501,025
1903.....	554,811	1909.....	2,030,516	1915.....	773,872
1904.....	814,565	1910.....	605,284	1916.....	888,941
1905.....	505,681	1911.....	1,350,485	1917.....	5,638,756
1906.....	1,943,058	1912.....	1,153,175	1918.....	4,950,689

[a] From the *Brazilian American*, Anniversary Number, 1923, p. 30.

the table on page 139 showing the stocks on hand at Santos on July 1 of the years named.

The figures show a great increase in stocks in 1909, an even greater decline in 1910 (the year 1909-10 having been one of large export) and again large stocks in 1911 and 1912. But in addition much of the coffee that was exported was actually being held in stock abroad and was not disposed of until later years. In February, 1912, four and one-half million bags remained in the control of the Valorization Committee. Meanwhile such valorized coffee as was put on the market (there was no new purchase) was obviously being handled in such a manner as not to prevent the rise of prices. During these years, therefore, it looks as if American consumers were burdened perhaps to the extent of three to five cents a pound by the restrictive measures that accompanied valorization. In 1913 prices fell by some four or five cents a pound—a decline which would surely have been less marked had it not been for the gradual release, following legal proceedings by the American government in the summer and fall of 1912 (see page 143), of over 900,000 bags of valorized coffee stored in New York.

Whether, in the ultimate view, prices were higher during these years than they would have been eventually had there been no control measures, there is no means of telling. There is evidence that without such action many planters would have been ruined and many plantations would have reverted

to jungle. Subsequent crops might have been so small that in the long run the increase in the price of coffee would have been greater than that which actually took place.[13]

What might have happened had there been no state intervention is a matter of conjecture. The tangible result was a sufficient price collected from consumers to pay the merchants and bankers for their services and to yield a profit to the State of Sao Paulo, and probably also to the planters.

The merchants and bankers received interest and commissions amounting to over 9 per cent on their

[13] The evidence referred to is found in the testimony of Hermann Sielcken before the subcommittee of the Committee on Banking and Currency in 1912 during the so-called Money Trust Investigation. In reference to the conditions in Sao Paulo in 1906, Mr. Sielcken testified as follows: "Supposing that the planters at that time, during 1906 and 1907, . . . had been unable to obtain money—and I wish the committee would receive the opinions of others, of other merchants in the trade, merchants who have been successful and have shown that they understand their business—the price of coffee today, without the valorization would be higher than it is. In 1906 and 1907 the price would have gone very much lower. I have not the slightest doubt that the crop would have been sold at a ridiculously low price, so low a price as to prevent the planters from paying interest on their mortgages or continuing their business, and if that had happened, the subsequent crops would have been smaller and smaller all the time. There we had a record crop of nearly 20,000,000 bags in Rio and Santos; 15,000,000 bags in Santos alone. Since then the crops we have had there have been, this year, say, nine and three-fourths millions, last year 8,000,000, and next year, from my information I should say the crop would be 7,000,000 bags. In case the plantations had been neglected, we might have had crops of two, three, and four million bags, and a price for coffee of 25 cents."

loan.[14] The Committee of seven received a commission of 1 per cent on their sales. This form of remuneration made it to their advantage to hold the coffee for an advance in price. The balance sheet of the State of Sao Paulo showed a profit of some fifty million dollars[15] after consideration of original outlay, all storage and interest charges, and all income from the sale of coffee, from the surtax, and from Germany on account of coffee seized. Enough of the final sales price of the coffee filtered through to the planters to leave them well satisfied that the price which they received was much better than that which they would have received had the valorization operations not been undertaken.

These benefits to merchants, to bankers, to the

[14] The early loans bore interest at 6 per cent plus 3 per cent commission for storage. The bankers' loan of £15,000,000 bore interest at 5 per cent plus 3 per cent commission for storage, but as the loan was floated at 85 and paid at par this discount resulted in a cost to the state which virtually amounted to a payment of more than 9 per cent on the money received.

[15] The balance sheet showed initial expenditures for coffee in 1906-1908 of 280,000,000 milreis. To this amount must be added expenses for interest, commissions, and other carrying charges amounting to 383,000,000 milreis, making the total costs 663,000,000 milreis. Income from valorized coffee amounted to 393,000,000 milreis—a sum but little in excess of carrying charges. To this must be added the income from the 5-franc surtax amounting to 506,715,000 francs (converted in the state's accounting to 324,675,000 milreis) and finally the 120,000,000 gold marks for which Germany acknowledged liability in 1919 on account of coffee seized during the War. Reduced to American money these debits and credits leave a net balance in favor of the state of some $50,000,000.

State of Sao Paulo, and to planters were, of course, paid for by final consumers of coffee through what they believed to be an extortionate price. Whether the price which they paid was higher in the long run than that which they would have been compelled to pay had there been no valorization is a debatable question.[10] Consumers believed that they were being imposed upon, and their protests did not go wholly unheeded by their governments. In 1912 a subcommittee of the Committee on Banking and Currency of the United States House of Representatives made an investigation known as the "Money Trust Investigation," in which Hermann Sielcken was sharply questioned for the part which he had played in the valorization and subsequent proceedings, and the criticism was by implication extended to the government of Sao Paulo. In the same year the United States government brought suit under the anti-trust law against Sielcken and his associates. The latter, however, were outside the jurisdiction of the United States. The immediate object of the suit was to compel the sale of some 900,000 bags of coffee stored in New York City. The government did not win its suit but by private agreement the Brazilians disposed of the coffee. The governments of Germany (1910) and

[10] The possibilities which might have followed a collapse of the coffee industry in Brazil in 1906-07 have already been discussed. Moreover, it is fair to state that prices from 1910 to 1913, though often twice as high as they had been in the previous decade, were not as high as the prices which consumers had paid without protest in the nineties.

of France (1912) also investigated the operations of the Brazilians.

Briefly summarized, our conclusion is that the first valorization and the restrictive measures which accompanied it prevented a severe fall in price in 1906-07, and enabled the Committee conducting the operations to maintain an artificial price during the years 1910, 1911, and 1912 higher than that which the "statistical position" of coffee seemed to justify. This higher price resulted in a benefit to the merchants and bankers, to the government of Sao Paulo, and to the coffee planters; and in a corresponding burden on consumers. The popular indignation felt because of this burden resulted in some international friction. In passing judgment, however, it should be remembered that this burden must be weighed against the possibly greater burden to which consumers might have been subjected had no action been taken.

II. THE SECOND AND THIRD VALORIZATIONS, 1917-1923

Two further valorizations of coffee took place. Both, however, were for much shorter periods than the first valorization. They need be only summarily recounted before taking up Brazil's present policy of regulating the price of coffee.

The chief effect of the second valorization by Sao Paulo in 1917-1920 was to moderate extreme price fluctuations. By referring to the chart on page 136 it will be seen that, following the high level of 1910-1912, prices declined to figures which, consid-

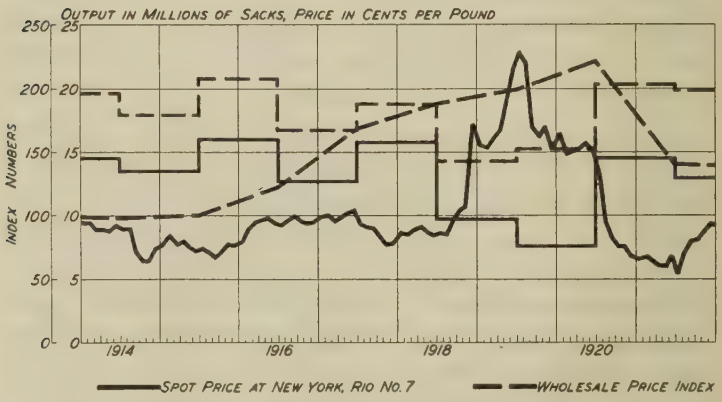
ering the decreased purchasing power of money, were comparable with those of the years of greatest depression during the preceding decade.[17] In the last months of 1918, however, prices began to rise and rose rapidly until July, 1919, when they reached a peak of nearly 23 cents a pound, and then as rapidly declined. The trend of prices and of output for the period 1914-1929 is shown in the chart on pages 146-47.

It was during the period of low prices that the second valorization was undertaken. The situation that led to it may be explained in a few words. The World War had cut off exports to Central Europe and had led to restrictions upon imports into the belligerent countries. Shipments so decreased that stocks on hand in Santos rose from 889,000 bags on July 1, 1916, to 5,639,000 on July 1, 1917—about 60 per cent of the 1916-17 crop in the Santos area. Higher freight rates led to an increase of the difference between prices at New York and at Santos. The crop of 1917-18 (15,800,000 bags) was over 3,000,000 bags in excess of that of the preceding year and resulted in a drop in price in the latter half of 1917 which reached 7½ cents a pound in November. The State of Sao Paulo thereupon borrowed a sum equivalent to $27,500,000 from the federal government and bought coffee to the extent of 3,074,000 bags—just about the amount of the excess crop.

[17] It will be noted that in 1917-18 the depression of prices below the index number for the year was greater than at any time from 1901 to 1909.

This purchase undoubtedly prevented a further decline of prices. The Brazilian crops for the two following years were the smallest in this century—9,700,000 and 7,500,000 bags, respectively. During

PRICES AND "OUTPUT"

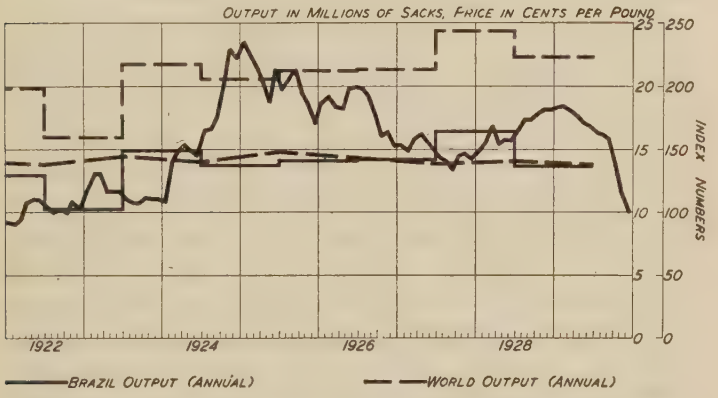


[a] In endeavoring to show output we have been compelled figures, as given in the table on p. 166. The figures understate Because of control measures in Brazil, they tend also to true since 1927, and so this part of the chart should be read

this time the demand for coffee was greatly strengthened through the resumption of trade with Germany. The sharp rise in price in 1919 is thus easy to account for. The valorized coffee was sold in 1919 at a profit (divided between the state and federal governments) of some $20,000,000, or nearly 70 per cent on the investment. The government thus made a handsome profit, but the high prices of 1919 cannot be attributed to valorization. In so far as valorization had any effect its tendency was to moderate the prices of that year. The govern-

ment of Sao Paulo, in the interest of its chief industry, accepted a risk; and Nature, through a severe frost which cut down the coffee crop, played into its hands.

OF COFFEE, 1914-1929 [a]



to use what are substantially world and Brazilian export production by the amounts consumed in producing countries. understate annual fluctuations of output. Especially is this only in conjunction with the text on pp. 157-60 and 163-69.

To what extent the profit was obtained at the expense of consumers is a question. They undoubtedly paid more for their coffee in 1918 than they would have paid without valorization, but in 1919 they probably paid less. It would seem that the planters, by shifting the risk to their government, were the chief contributors to the profit. They were insured against loss in 1918, but this insurance was paid for by the sacrifice of greater gains in 1919.

The third valorization, like the second, moderated price fluctuations. The rapid decline in prices following the peak in 1919 has already been noted.

The decline continued throughout 1920 and for some months in 1921. A general upward trend then set in which continued until January, 1925. To account for these price movements and the part which valorization played in them we must again make a survey of the general situation.

The small crop of 1919-20 was followed by a large crop in 1920-21. Business depression throughout the world had lessened the demand; and to make matters worse, various European governments undertook to decrease the importation of luxuries, including coffee, by higher taxes or other restrictions. The result was that by the end of 1920 the New York price of Rio No. 7 had fallen to seven cents a pound. Nor did it stop there. By March, 1921, it had reached five cents a pound—the lowest price on record.[18] Still worse for the planters, Brazilian exchange rose so that each dollar credited in New York to a coffee planter meant a smaller number of milreis.

The planters believed, however, that with visible supplies of only 36.2 per cent of the previous year's consumption—a figure much lower than that to which trade had become accustomed through most of the period since 1902—the price should have been fairly high instead of extremely low. Naturally, therefore, they turned to the government to restore prices. The success of previous valorizations

[18] At any rate, since 1896. According to a table supplied by the New York Coffee Exchange, five cents is the lowest price since 1896, which ended a period of high prices. The lowness of the price is even more striking when comparison is made with index numbers than when expressed in absolute terms.

made action by the government of Sao Paulo in response to their appeals inevitable. But on this occasion it was the federal government that took the leading part in the operation. Before the end of 1920 the government of Sao Paulo bought 300,000 bags of coffee. The federal government began to buy in March of 1921 and at one time held 4,534,000 bags. In 1922 the valorization operation was supported by a loan of 9,000,000 pounds sterling, of which 2,000,000 pounds were furnished by Dillon, Read and Company, of New York.

An order of July 21, 1921, limited receipts of coffee in Santos to 30,000 bags a day. A year later another order limited receipts in Santos to 28,000 and in Rio to 11,000 bags a day. This valorization differed from the previous ones in that the coffee was stored in Brazil rather than in Europe. Another new feature was a law of November, 1922, requiring 5 per cent of the amount of coffee produced to be reserved for local requirements.[19] The obvious purpose was to exempt the Brazilian consumer from the effects of withholding coffee from the market on a large scale.

The Santos crop of 1922-23 was, with two exceptions, the smallest of the century, and the total world output was considerably below the average. This shortage of crop contributed materially to the success of the third valorization. Prices began to rise in the summer of 1921 and continued a general upward trend until January, 1925. There was a

[19] *Tea and Coffee Trade Journal*, December, 1924, p. 922.

slight reaction in the spring and summer of 1923, apparently due to the prospect of an increased crop the following year, but in 1924 the upward trend was resumed. This rise is somewhat surprising in view of the fact that a large part of the valorized coffee was sold in the latter part of 1923. It can only be accounted for by a general strengthening of demand arising from improving business conditions in Europe and America and from a slight decline in output. On the whole the third valorization like the second appears to have moderated price fluctuations and to have yielded handsome profits to its promoters. Former President Pessao estimated the state's profits at 40 per cent of the capital invested.

III. "PERMANENT DEFENSE"

The success of the third valorization gave victory to the proponents of permanent control of the supply of coffee. Valorization had proved successful in two crises and was being used with every prospect of success in the third. It was decided to go a step further and to establish a permanent organization to deal with the two problems which constantly confront coffee growers: the first, that which comes from the alternation of large and small crops; and the second, that arising from the tendency for the whole crop to come upon the market in a period of four or five months.

The yields of coffee trees show marked irregularity from year to year. Large crops seldom come in successive years. The Brazilians relied upon this alternation to aid them in their valorization opera-

tions. After the record crop of 1906-07, a smaller yield helped to liquidate the large supply of coffee which was withdrawn from the market. Short crops also followed both the 1917 and 1921 valorizations. A short crop followed the enormous yield of 1927-28.

Less serious, apparently, is the problem arising from the seasonal marketing of the crop. It is true that, until recently, entries of coffee into Santos, the principal port of shipment, were centered in the first six months of the crop year. But prices of coffee seem not to have been greatly disturbed thereby. Thus the average prices for spot Rio No. 7 in New York for the 26 years 1900-1925, were 9.80 cents from July through December and 10.02 from January through June. Since 1921, entries have been much more regular than before, and the marketing of the crop has been spread over greater portions of the year. Nevertheless stabilization of prices within the crop year is one of the objects for which the present system of control is maintained.

Measures by the State of Sao Paulo for the permanent defense of coffee came into operation early in 1925. A bill had been adopted by the federal legislature of Brazil nearly three years earlier (June 19, 1922). For various reasons, however, the federal government withdrew[20] from the field in 1924

[20] The federal law creating the *Instituto de Defesa Permanente do Café* was a portion of a law for the promotion of various national products. The erection of the warehouses was the only part of the federal defense which was carried out. Friction developed between the State of Sao Paulo and the federal government because of the latter's

and the State of Sao Paulo took over the operation of the defense of coffee. Late in 1924 the state purchased from the federal government the ten large warehouses which had been erected in the interior. It then proceeded (in December, 1924) to pass a law for the permanent defense of coffee, and five months later the machinery of the law was set in operation. The machinery was placed in the hands of an Institute for the Permanent Defense of Coffee (later reorganized as the Sao Paulo Coffee Institute) consisting of the Ministers of Finance and of Agriculture, one representative of the exporters, and two representatives of the coffee planters. The President of the state appoints the three non-official members. The activities of the Institute are under the immediate direction of the Minister of Finance, and the Institute has been considered, in effect, a branch of the Department of Finance.

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interest in products other than coffee and because the policy of the federal government was directed toward raising Brazilian exchange whereas the producers and exporters of coffee felt every rise in Brazilian exchange to be an injury to their interests.

In spite of the withdrawal of the federal government, defense measures rapidly went forward throughout Brazil. By 1927 most of the coffee-growing states had established such measures; and in 1927-28 a series of interstate agreements between eight states, representing almost the entire industry, brought about close co-operation with Sao Paulo in the administration of the coffee defense. In December, 1927, the Brazilian federal Congress passed a law authorizing the federal government to regulate interstate and foreign commerce in coffee; but in actual practice this law made no change in the defense as conducted by the Sao Paulo Institute in co-operation with the other states.

The measures adopted aim primarily at price stabilization through regulation of supplies coming into the market. Such, to be sure, is not their sole aim. Two others are included; namely, the carrying on of propaganda for the increased use of coffee and the fostering of scientific and educational work designed to improve the domestic industry. Neither, however, is important as compared with the price-regulating functions of the Institute.

The means by which the Institute is to attain its objects are various; but continuous regulation of supplies coming into the market is the real core of its activity. The purpose of the Institute is stated to be to resort to valorization only in "emergencies"; though there are indications that the word "emergencies" is apt to be very loosely interpreted.[21] For the ordinary regulation of prices the Institute is to rely upon two methods: the publication of statistics and the control of quantities offered on the Santos market. It is to maintain a statistical and informational service avowedly for the purpose of eliminating speculation and unwarranted price changes by keeping the whole world fully and accurately informed of the coffee situation. It is to continue the regulation of entries into the port of Santos so that supplies on that market shall be

[21] In the latter part of 1926 and the early months of 1927 the price dropped about five cents and the Institute began to buy, but even at its lowest point (15 cents) the price was high as compared with the average price since the beginning of the century and also high as compared with index numbers of wholesale prices. The situation could hardly be called an emergency.

approximately constant. But in regulating these entries it is provided with resources that enable it to operate within much wider limits than was possible prior to the adoption of permanent defense.

Regulation of supplies marketed is facilitated by an extensive government warehousing system and by elaborate credit operations. These facilities make possible for the first time the storing of vast supplies within the interior of Sao Paulo and they constitute the chief innovation in the present plan of permanent defense. They tend to remove the difficulty of limiting entries into Santos, and also some of the difficulties which arose after 1920 from the reduced ability of European countries to finance the shipment of coffee. They tend to shift the burden of storage to the Brazilians, but enable them also to maintain complete control over stocks.

The warehouses constructed by the federal government in 1924 had a capacity of 4,500,000 bags. Since that time additional warehouses have been built or rented, so that the total space now available is some two or three times that amount. These warehouses, however, are not merely for the purpose of relieving growers who do not have storage space of their own. Nor are they merely to keep the coffee out of sight and off the Santos market. Their significance is even greater for they are a means of maintaining close control over the whole marketing of the crop. Since the law requires the planters to ship all their coffee to the Institute warehouses, all supplies are constantly "visible" so far as the government is concerned; and their

disposal is completely subject to the discretion of the government. The railroads ship to Santos only from the warehouses, and move the different lots of coffee in the same order in which they were deposited.

The cost of storing coffee and the other costs of defense have involved both borrowing and taxation. In 1926 a loan of 10,000,000 pounds sterling was secured by the Coffee Institute from British bankers. The loan was guaranteed by the State of Sao Paulo. In 1927, and again in 1928 and 1929, additional credits of 5,000,000 pounds each were obtained from the same quarter. All four of these credit advances were obtained primarily for making loans to coffee planters and were secured by bills of lading or warehouse receipts. In 1927 another loan of 5,000,000 pounds (only 3,750,000 pounds of which have thus far been made available) was obtained by the Bank of the State of Sao Paulo (controlled by the Coffee Institute). Though this was for mortgage credits on rural and urban property, it presumably tended indirectly to enhance the credit available for coffee defense. Thus the state, through agencies controlled by it, was enabled to extend financial support for the growers up to 75 per cent of the market value of their coffee. The growers have paid some 8 or 9 per cent for their money.

The financing of the general expenses of the permanent defense, including interest on, and amortization of, foreign loans, is provided for by a tax of one milreis gold (54 cents) on each sack of coffee carried by the railroads from the state

warehouses to Santos. This tax, unlike the old five-franc tax, is ear-marked and reserved solely for the permanent defense of coffee. The five-franc tax, it may be noted, is still being collected.[22]

Brazil's enormous coffee crop of 1927-28, which exceeded the previous record crop of 1906-07, brought forth no new valorization or state purchase of coffee. The situation was handled by the extension of credit based largely upon the foreign loans to which reference has just been made. In November, 1926, the Bank of the State of Sao Paulo had been organized to be the basis for financing the agriculture of the state. On September 22, 1927, the statutes of the Bank were revised so as to create a separate mortgage section empowered to make loans for from 5 to 15 years on real estate, to a total of approximately 12,500,000 pounds sterling. The Institute had available the balance of its 10,000,000 pound sterling loan of 1926 which had not been expended for building warehouses and other purposes. With this balance and new borrowings, and with its tax income, large funds were available for the financing of the coffee planters. Thus the government succeeded, despite the large crop, in avoiding any immediate crisis; though ultimately, as we shall see, the increase of coffee stocks was to bring a collapse.

Permanent defense apparently maintained for

[22] The defense measures adopted by the other Brazilian states, while differing in detail, were in general similar to those of Sao Paulo and after 1927, as we have seen, were administered in close co-operation with the Sao Paulan defense.

several years a fairly high level of prices. This appears to have been the case up to 1929. It is, of course, impossible entirely to isolate the effects of defense operations from other factors influencing the general trend of prices. But it is sufficiently clear from a study of the behavior of prices and of coffee stocks that the defense operations had a very considerable influence. In January, 1925—early in the period of permanent defense but continuing from the previous period of control through valorization—prices touched the unprecedented height of 23.5 cents a pound. (See table, page 135 and chart, pp. 146-47.) From this peak the trend was downward until September, 1927, when the price reached 13.33 cents. From that time until February, 1929, the trend was upward. Even at the low point of 13.33 cents, however, the price was distinctly above the average price (11.29 cents) between 1918 and 1923 even though this average included the year 1919 when the price touched 22.83 cents.

Throughout the entire period, but especially after 1926, large quantities of coffee were in storage in Brazil. The table on page 158 shows the trend of supplies in Brazil from 1918-19 to 1928-29 inclusive. The figures are, for reasons that we need not go into, approximate rather than exact.

It is clear from the table that very considerable stocks were in storage in Brazil at all times during the period shown in the table—both before and after the adoption of permanent defense. Prior to 1924, however, they were stored chiefly at the ports, and

COFFEE SUPPLIES IN BRAZIL, 1918-19 TO 1928-29 [a]
(Figures in thousands of bags of 132 pounds each)

Crop Year Beginning July 1	Receipts at Brazilian Ports	Interior Stocks in Regulatory Warehouses at End of Crop Year [b]	Port Receipts Plus Interior Stocks	Stocks in Brazilian Ports at Beginning of Crop Year	Total Supply in Brazil during Crop Year [c]
1918..	9,712	...	9,712	6,634	16,346
1919..	7,500	...	7,500	5,714	13,214
1920..	14,496	...	14,496	1,948	16,444
1921..	12,862	...	12,862	4,038	16,900
1922..	10,194	...	10,194	4,115	14,309
1923..	14,864	4,592	19,456	1,971	21,427
1924..	13,721	1,786	15,507	1,532	17,039
1925..	14,114	2,833	16,947	1,738	18,685
1926..	14,184	3,312	17,496	1,478	18,974
1927..	16,420	12,852	29,272	1,107	30,379
1928..	13,621	8,921	22,542	1,473	24,015

[a] Data furnished by U. S. Department of Commerce, Foodstuffs Division.

[b] Figures for interior stocks not available for earlier crop years. Before that time, however, the bulk of the coffee (all except what was held in private warehouses on the plantations) went to port. Figures up to July 1, 1928, are for Sao Paulo only; those thereafter include stocks in regulatory warehouses of Rio.

[c] That is to say, supplies during the crop year out of which foreign requirements could have been met in the absence of any limitation on shipments to port. Actually, however, stocks held in the interior were not available to exporters.

these stocks were available to foreign buyers. They were available, moreover, in sufficient quantity to meet a discriminating demand as regards grade and quality. With the adoption of permanent defense a new situation developed. As new warehouse space became available in the interior, limitation of shipments to Santos and to other ports placed entirely in the hands of the defense authorities the

regulation of supplies accessible to the exporters.[23] The table shows that on July 1, 1924, nearly 4,600,000 bags were held in the interior. Though the amounts were smaller on July 1, in 1925, 1926, and 1927 they were still sufficient to have had a considerable effect on prices. Meanwhile, stocks available in Brazilian ports were kept small and transactions were completely in the hands of the defense authorities. Hence, although there was no increase of interior stocks from the first year of defense up to 1927-28, the amount held back at all times and the manner in which supplies were put on the market must have kept prices higher (and probably also more stable) than they would have been without such operations.

Nevertheless, as we have seen, prices kept declining from the high level at which they stood in the first year or two of the defense period. Without doubt the prospect of a vast crop in 1927-28 was a depressing factor in 1926-27. But with the actual harvesting of the crop, prices, instead of falling, began to rise. The explanation is apparent in the table. The Institute still continued rigidly to limit shipments to port and there was a consequent damming up of supplies in the interior. At the end of the crop year 1927-28 nearly 13,000,000 bags were in storage in the regulatory warehouses, plus whatever was held on the plantations—an amount

[23] At the same time, as we have elsewhere suggested, the burden of carrying stocks was transferred largely to the planters and hence increased advances of credit to them became necessary.

equal to nearly half the entire bumper crop of 1927-28 and to virtually a whole year's average exports. This, of course, called for increased extensions of credit, which were made possible by new loans to which reference has already been made.

By July 1, 1929, following a smaller crop, some 4,000,000 bags of the large stocks had been worked off. Nevertheless nearly 9,000,000 bags remained in the warehouses, and, with the large crop of 1929-30 coming on the market, a serious crisis developed.

Permanent defense proved inadequate in 1929 to prevent a serious slump in price. From the beginning of defense operations up to 1927-28 world consumption had kept pace approximately with production; hence there was no marked tendency for visible world stocks to increase. The situations presented by supply and demand conditions were not difficult. The defense methods which have been described, so far as Brazil was concerned, were adequate to meet them. Beginning with the crop of 1927-28, however, world production began greatly to exceed world consumption. On July 1, 1929, the visible world supply of coffee was 14,250,000 bags, of which approximately 10,500,000 bags (including stocks in the interior) were in Brazil, and it was estimated that on July 1, 1930, the visible supply would be between 21 and 22 million bags, of which some 18 or 19 million bags would be held in Brazil. Such a surplus would be only about 2,000,000 bags short of the annual world consumption. Meanwhile the continual carrying of the stocks had exhausted

the credit resources of the Institute and of private banks, and a sharp decline in prices set in. From 16 cents a pound in September the price fell to 11¾ cents in November, the lowest since January, 1924. Since that time it has remained low.

The collapse of prices created a serious emergency. Private and state banks were forced to suspend credits. Previous loans had been exhausted and assets generally were frozen. In November the Institute succeeded in obtaining a credit of 2,000,000 pounds from British bankers which temporarily eased the situation. But the conditions remained critical and prices continued low. Finally, in April, 1930, it was announced in the press that a loan of $100,000,000 was about to be consummated between a group of British, Continental, and American bankers and the government of Sao Paulo, to be secured by 16,500,000 bags of coffee. The terms, it was stated, would call for the sale of this entire amount within ten years and would require the state to place future crops on the market currently. The government would agree not to accumulate any coffee during the life of the loan except at the request of the bankers as further security for the loan.

The announcement was heralded in the press as an abandonment of valorization in Brazil. It is exceedingly difficult, however, to understand how all measures of control over current supplies can be abandoned without the risk of much further depression of prices in large-crop years. Current world production is already tending to exceed consumption, and the placing on the market of a large

current crop plus the stipulated amounts of stored coffee to be worked off might easily lead to an unprecedented price debacle. It is to be noted that the proposed loan agreement provides that the bankers may "authorize" the state to accumulate stocks from current crops in order to protect their loan. If the history of the first valorization repeats itself, the bankers will indeed be compelled to assume a large measure of control over the entire operation of the industry throughout the life of the loan; and hence control, far from being abandoned, will have been merely shifted to them. On the other hand, it is possible that there will be consistent refusal to accumulate any considerable stocks from current output lest in the end matters be made worse rather than better. All this resides in the future.

Notable by-products of permanent defense have been irritation and criticism, both at home and abroad. The actual achievements of the Institute in accomplishing its main purpose of maintaining and stabilizing prices are debatable. Of its success in arousing hostile criticism directed against itself there is no doubt.

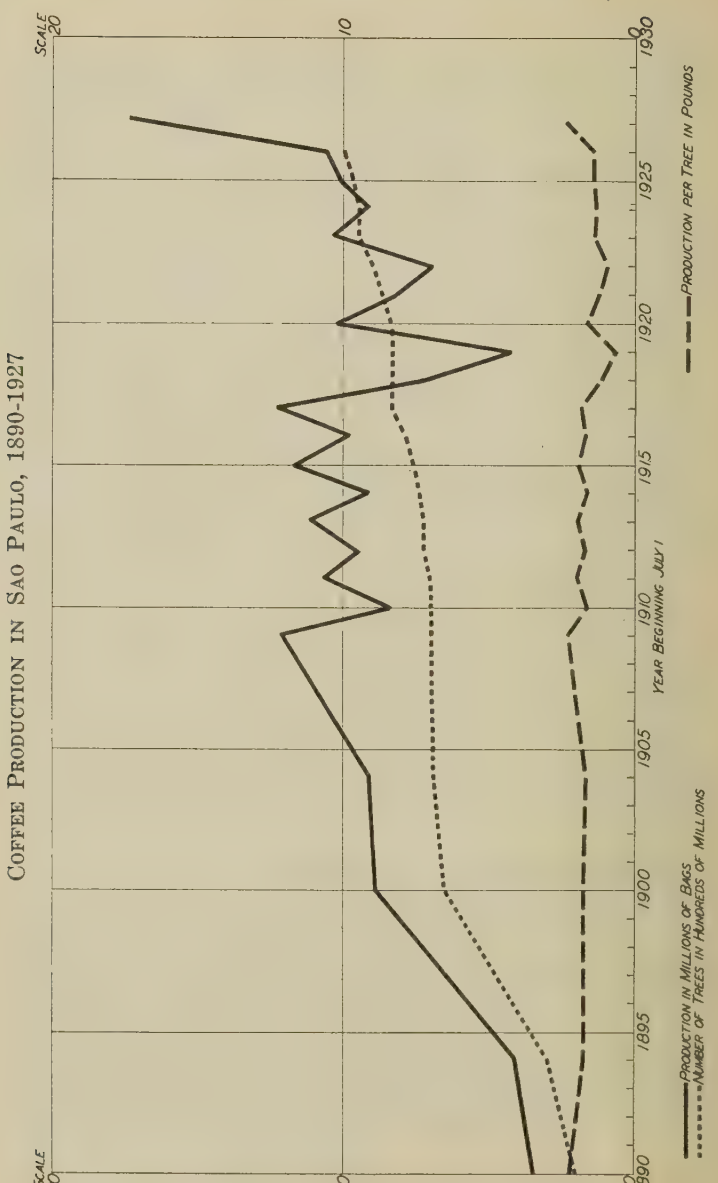
Consumers in the United States were indignant because of the high prices. The high prices resulted in a decrease of imports. In 1925 imports into the United States were about 9 per cent less than in the year before and importers became apprehensive regarding the future of their business.

The Institute likewise met with no lack of criticism in its own country. The allegation was made

that it had not succeeded in regulating entries into Santos as well as had been done in earlier years. It was stated that a greater part of the crop came on the market in the earlier part of the crop year 1925-26 than in some previous years and that the manipulation of the market did not keep prices steady. Brazilian producers, who had expected the Institute to "protect the new price levels" were disappointed when prices went down and were not slow to voice their disappointment. The Institute was alternately charged with being a "bull" and a "bear" operator on the market. It was attacked for failing to publish the reliable and impartial information in regard to the coffee situation which it had promised. It was accused, on the contrary, of maintaining secrecy and of promoting false ideas of the existing situation.

Contradictory criticism provoked contradictory utterances on the part of the Institute. In Brazil it asserted that the high prices were due to the successful operation of the new measures; in other countries it said they were the inevitable result of low stocks of coffee and of its strong statistical position.

Diversification of agriculture appears to have been checked rather than promoted by valorization and defense of coffee. As was stated earlier in the chapter (page 134) one of the main objectives of valorization and defense was a more diversified agriculture. In Sao Paulo, although a variety of crops could have been raised, coffee cultivation had been so predominant that for years it had been


COFFEE PRODUCTION IN SAO PAULO, 1890-1927
SCALE
20
10
0
1890
1895
1900
1905
1910
1915
1920
1925
1930
YEAR BEGINNING JULY 1
PRODUCTION IN MILLIONS OF BAGS
NUMBER OF TREES IN HUNDREDS OF MILLIONS
PRODUCTION PER TREE IN POUNDS

necessary to import large quantities of foodstuffs. The tax on the planting of new areas in coffee was inspired partly by the hope of inducing farmers to diversify their crops.[24]

In arriving at a judgment as to the net effect of control measures upon diversification two factors must be considered: first, direct restrictions upon planting; and second, price. In so far as there have been direct restrictions upon planting, they must have tended to promote diversification. But it is asserted that such restrictions have never been effectively enforced; and it is manifest from a glance at the chart on page 164 that, so far as Sao Paulo is concerned, they have not prevented a steady increase in the productive capacity of the industry. The chart discloses that there has been some decline in the production per tree; and it is possible that the tax on new plantings contributed to this result by making somewhat higher than would otherwise have been the case the proportion of old and less fruitful trees. Clearly, however, restriction of planting has not been a dominant factor.

On the other hand, control has undoubtedly had the effect on the whole of raising prices and thus encouraging rather than checking expansion of the

[24] The following statements appear in the testimony of Hermann Sielcken: "If you wish to know the truth, the effect was a different one. They wanted to induce the planters, instead of planting coffee alone, to plant beans, corn, and other things—to diversify their crops." And later: "The state of Sao Paulo passed the law as a paternal measure to diversify their crops and to direct their planters, to make it more difficult for them to plant coffee only."—*Money Trust Investigation*, pp. 25-26.

EXPORTS OF COFFEE FROM BRAZIL AND OTHER PRODUCING AREAS, 1900-1929 [a]

(In thousands of sacks)

Crop Year	From Brazil	From Other Producing Countries	Total
1900–01	11,285	3,785	15,070
1901–02	16,145	3,645	19,790
1902–03	12,945	3,720	16,665
1903–04	11,101	4,891	15,992
1904–05	10,523	3,923	14,446
1905–06	10,844	3,948	14,792
1906–07	20,190	3,596	23,786
1907–08	11,001	3,861	14,862
1908–09	12,912	4,003	16,915
1909–10	15,324	3,801	19,125
1910–11	10,848	3,676	14,525
1911–12	13,037	4,337	17,374
1912–13	12,131	4,275	16,406
1913–14	14,457	5,154	19,611
1914–15	13,471	4,394	17,865
1915–16	15,960	4,801	20,761
1916–17	12,741	3,951	16,692
1917–18	15,836	3,011	18,847
1918–19	9,712	4,500	14,212
1919–20	7,500	7,681	15,181
1920–21	14,496	5,787	20,283
1921–22	12,862	6,926	19,788
1922–23	10,194	5,705	15,899
1923–24	14,864	6,868	21,732
1924–25	13,721	6,762	20,483
1925–26	14,114	7,052	21,166
1926–27	14,184	7,068	21,252
1927–28	16,420	8,003	24,423
1928–29	13,621	8,660	22,281

[a] Source: *Le Café* (published by Laneuville at Le Havre). The figures shown in the table are not strictly comparable. The figures for Brazil are the total receipts in Brazilian ports; those for "other producing countries" are for exports to Europe and the United States. Coffee retained and con-

coffee industry. Not only has the industry expanded in the State of Sao Paulo, but a significant feature is its increasing extension to other parts of Brazil. There has, to be sure, been a growth of other branches of agriculture in all the coffee-growing states; but such fragmentary data as we have been able to assemble do not show that this growth has been out of proportion to that of the coffee industry.[25] And in any case it must have occurred in spite, rather than because, of the price-bolstering activities associated with control of the coffee industry. If, as the result of the great expansion of the industry in recent years both within and outside Brazil (for which valorization and defense have been partly responsible), prices should remain low for some years to come, the situation may be reversed: diversification may be stimulated. But thus far it appears to have been hindered rather than encouraged.

Brazil's relative position in the world's coffee trade has tended to decline. This is revealed in the table on page 166 and is brought out more clearly in the chart on page 168. The tendency of Brazilian exports to increase less rapidly than those of other countries is apparent in the chart. The straight line trends indicate that from a position of 81 per

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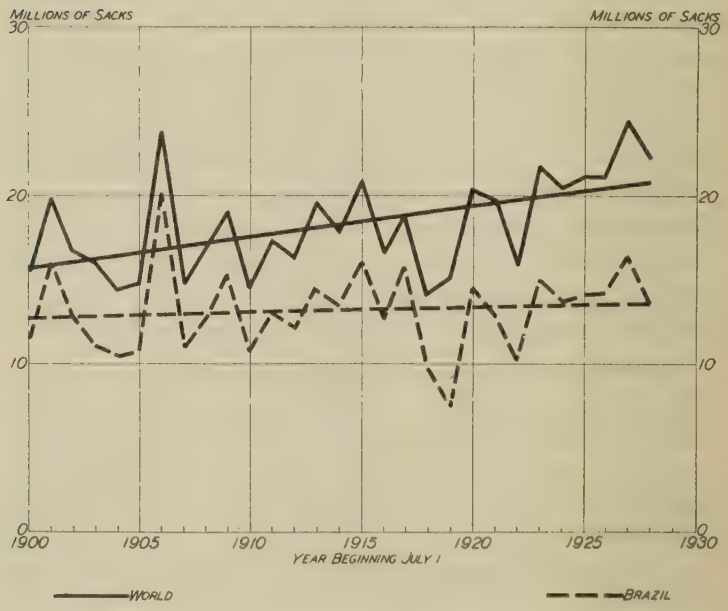
sumed in the interior of the several producing countries is not included. Yet the figures roughly indicate trends in world production. They are known to the trade as "harvest figures." Complete production statistics do not exist.

[25] In 1913, coffee accounted for 62.3 per cent of the value of all Brazilian exports; since 1924 it has accounted for from 70 to 75 per cent. Production figures indicate some growth of other branches of agriculture, but do not indicate any serious inroads into coffee-growing.

cent of the world trade Brazil's exports have decreased to 66 per cent. Much of the increase outside Brazil has been in Colombia and Central America. Because of the large accumulation of stocks in Brazil since 1927, the chart is somewhat

BRAZIL'S POSITION IN WORLD COFFEE EXPORT TRADE, 1900-1928



misleading as regards Brazil's relative position in production; but until that time, at least, it is clear enough that she was losing ground as a producer also. How far this would have been the case even had there been no control of the industry it is impossible to tell. Very likely there would have

been expansion of the industry in other countries in any event. Nevertheless Brazilian valorization and defense have undoubtedly furnished an added stimulus to expansion in other countries, since they have enabled producers in those countries to obtain higher prices without assuming any of the burdens incident to control.

IV. CONCLUSIONS

In the early years of the century the coffee industry of Brazil was apparently saved from complete collapse by valorization and the restrictive measures associated with it. At various periods thereafter prices have been maintained at figures which brought no small benefit to the planters and a very considerable profit to the state. While it would be too much to say that prices have been "stabilized," it may safely be said that extreme fluctuations have been moderated. The remarkable regularity with which large and small crops have alternated with one another (see chart on page 164) suggests the feasibility, perhaps the desirability, of some measure of government control looking toward the prevention of wide fluctuations in price from year to year. Seasonal stabilization of prices through "orderly" marketing of each year's crops also appears to be feasible by means of the limitation of entries into the principal ports and the storage of the crop in government warehouses. Seasonal fluctuations in price, however, have never been a very serious problem. On the other hand the recent collapse of prices and the critical situation

that now prevails in the Brazilian industry bear witness to the limitations inherent in a policy of withholding supplies from the market, whether through state purchase (valorization) or through storage and credit operations backed by the state (permanent defense).

For the purposes of this study it is important to note effects of an international character as well as those bearing on the welfare of Brazilian coffee planters or the Brazilian people in general. To the extent that the methods employed have been successful in maintaining a higher price for coffee than would otherwise have prevailed they have resulted in a burden on foreign consumers, and as about 50 per cent of the Brazilian coffee is consumed in the United States a large share of the burden has fallen upon American consumers. Just how great this burden has been cannot be stated with precision as it is impossible to determine what prices would have been without valorization and other restrictive measures.

Indeed, if the contention of some of the defenders of valorization (that it saved the industry from complete collapse) is sound, then it was in reality no burden at all but, viewed in its entirety, a benefit. This, however, is an undemonstrable hypothesis. Reasons have been given for believing that the methods employed were effective in raising prices, and estimates have been made of the extent to which on several occasions prices were raised. Moreover, even if we were to grant the soundness of Mr. Sielcken's questionable contention that the valoriza-

tion plan was of ultimate benefit to consumers, it is certain that they felt it to be a burden and resented it, as they have the subsequent efforts to control prices. Quite apart from their economic results, therefore, valorization and the other restrictive measures applied by Brazil have been a genuine source of international friction.

CHAPTER VI

BRITISH EXPORT RESTRICTIONS ON RUBBER

We come now to a third case of control of exports for the purpose of aiding producers of the raw material; namely, the recent British restriction of colonial exports of rubber. It may be confidently said that no other experience with restriction has occasioned such widespread concern to consuming countries. Especially was this true in the United States. The vastness of the consuming industry chiefly affected (the automobile industry), the importance to it of adequate supplies of rubber and the completeness of its dependence upon foreign sources for them, and the ingenuity and the success (or at least the temporary success) of the plan of restriction adopted by the British—all served to arouse in the United States an unprecedented feeling of anxiety concerning the growth of controls of raw materials.

The so-called Stevenson Plan by which restriction was put into effect has been abandoned; but not, as we shall show, because it failed of its immediate purpose. Even had it failed, as some observers have apparently assumed, it would still be worth discussing because of the significance of the attempt. It was an attempt to secure for the producers, through

the medium of a carefully elaborated scheme of virtually direct regulation of exports (and, in effect, of output), much higher prices than would have been possible in the absence of regulation. It was applied to the raw material of a great manufacturing industry; and further, to a raw material which is producible from new sources only after a long period of preparation and waiting and for which no adequate commercial substitute has yet been developed. In contrast to the situation that long prevailed in the potash monopoly, the plan of restriction did not discriminate in favor of domestic consumers. Yet so vast are the consumptive requirements of the United States for rubber compared with those of other nations that it was nevertheless the United States upon which the chief burden fell.

In this chapter we shall first outline briefly the history and nature of the restriction scheme, beginning with the conditions leading to its adoption on November 1, 1922, and ending with its abandonment on November 1, 1928. We shall then undertake to examine in further detail the effectiveness of the scheme and the objects and consequences of its adoption.

I. THE RESTRICTION PLAN

The spectacular rise of the plantation rubber industry, leaving the wild rubber industry as a relatively minor source, need not be traced. It is sufficient for our purpose to note that the greatest boom came about 1910 and that the plantings of that period produced by 1918, for the first time, a really

adequate supply of rubber. By the end of the World War the supplies on the market had become so abundant that rubber failed to share in the general rise of prices in the period immediately thereafter. But it was not until the depression of 1920 that prices of rubber fell so low that the industry was confronted with what appeared to be a serious crisis.

Owing to the post-war crisis in the rubber industry, the British government adopted, late in 1922, the so-called Stevenson Plan for restriction of exports. After private efforts to bring relief had proved largely futile, the Colonial Office of the British government appointed a committee under the chairmanship of the late Lord Stevenson to investigate and report.[1] This committee, on which the rubber growers were well represented, reported on May 19, 1922, in favor of obtaining the co-operation of the Dutch government for a restriction program. This co-operation could not, however, be secured. On October 2, therefore, although the price of rubber had been slowly rising since August, the committee reported in favor of restriction by the British government with such voluntary co-operation as could be secured elsewhere. Thereupon the Colonial Office

[1] "The original responsibility for the restriction scheme rested with the Rubber Growers' Association. The association had first tried to organize a system of voluntary control, which failed. The Rubber Growers' Association then asked Mr. Churchill [Secretary for the Colonies] to intervene, but he refused; they asked again and still he refused. When the association, however, were able to secure a backing in the House of Commons, the Secretary of State for the Colonies consented. . . ." *Rubber Age* (London), August, 1926, p. 228.

sent the appropriate directions to the chief rubber-producing colonies, which forthwith enacted the requisite legislation, effective November 1, 1922, to restrict exports, and thereby production, of rubber. While there were slight differences of detail in the various enactments it is convenient to treat the legislation of British Malaya [2] and of Ceylon together under the designation, the Stevenson Restriction Act.

The purpose of the Stevenson Act, at least so far as it can be gathered from the representations of the rubber interests, was to save their industry from disaster. They asserted that some such intervention was necessary to protect not only their own interests but also the interests of consumers. If no concerted action were taken, they said, planters would be ruined, their plantations would revert to jungle, and there would be a rubber famine, to the great injury of rubber users as well as of rubber producers. To what extent their fears were warranted by actual conditions will be discussed more at length in another place (see page 200). We will first show just what the Stevenson Act was and what were its effects.

The Stevenson Act was essentially a plan for raising prices by limiting production. Technically, only the exportation of rubber was restricted. But back of this restriction was the plain intent of limiting production and thus bolstering prices. The colonial

[2] The Colony of the Straits Settlements, the four Federated Malay States, the five Protected Malay States on the Malay Peninsula, and the Protectorate of Sarawak on the island of Borneo. For the Stevenson Report, see Appendix D, p. 401.

authorities were empowered to assign to each estate a "standard production" based upon (but not necessarily equal to) the production of the year ended October 31, 1920,[3] with certain additional allotments for areas which came into bearing later. This "standard production" was later revised, reduced, and then increased in the total at least; but it always remained less than the full productive capacity of the plantations by amounts variously estimated at from 13 to 20 per cent.[4] The Act then provided that

[3] The year before voluntary restriction began. In 1921 the Rubber Growers' Association made a partly successful attempt to reduce production by 25 per cent through a voluntary agreement among the planters. Exports from British Malaya were 174,000 tons in 1920 and 151,000 in 1921.

[4] Standard production (in tons) in Malaya and Ceylon was as follows:

	Malaya	Ceylon	Total
1922–23	270,000	60,034	330,034
1923–24	260,400	62,282	322,682
1924–25	276,793	65,807	342,600
1925–26	314,853	70,475	385,328
1926–27	336,995	73,839	410,834
1927–28	314,575	76,300	390,875

These figures were furnished by the Rubber Division, U. S. Department of Commerce. The figures for Malaya were collected by the Rubber Division from bulletins of the Rubber Growers' Association and those for Ceylon were reported by the office of the Rubber Controller of Ceylon.

In reading statements concerning the percentage of production it must constantly be borne in mind that the percentage does not relate to the full potential production but to the arbitrary "standard production." This observation applies particularly to the statement sometimes made that the restriction scheme expired on February 1, 1926, with the release of 100 per cent of standard production. It should be noted, however, that a plantation which had reduced its labor force to handle only a restricted output might not have been able to

the quantity exported[5] should vary with the price of rubber in London. During the three months beginning November 1, 1922, no plantation was allowed to export at a rate which would exceed, in a full year, 60 per cent of its "standard" production. If during that quarter the price of rubber in London averaged less than one shilling per pound,[6] the percentage of standard production upon which the rate of exportation for the following three months should be based was to be reduced from 60 to 55 per cent. Similarly, if in any subsequent quarter the price of rubber in London averaged below one shilling a pound, 5 per cent of standard production was to be subtracted from the percentage which had been permitted to be exported in the previous three months. On the other hand, if the price in London for any quarter averaged over 1*s.* 3*d.* a pound, the amount which might be exported during the next three months would be greater than in the preceding

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recruit labor to take prompt advantage of an increased allowance for export. This temporary inability to attain "standard production," or the policy of not attempting to reach it when another reduction was in prospect, apparently led some to the belief that "standard production" exceeded the "economic production" of the industry.

[5] Strictly speaking, exports were not limited directly but rather by means of an export tax. But the rates of the tax were worked out in such a manner as to insure that the duty on exports in excess of stipulated amounts would be prohibitive.

[6] At the time the Act was passed 1*s.* was equal to 23 cents at current rates of exchange; 1*s.* 3*d.* to 29 cents, and 1*s.* 6*d.* to 34 cents. During the life of the Act exchange fluctuated. When at par 1*s.* is equal to 24.3 cents, 1*s.* 3*d.* to 30.4 cents. and 1*s.* 6*d.* to 36.5 cents.

quarter by 5 per cent of standard production. And if the London price of rubber during any quarter exceeded 1*s.* 6*d.*, the rate of the release of rubber for export would be raised by 10 per cent of standard production.

The pivotal prices, it will be noted, were 1*s.* and 1*s.* 3*d.*[7] These prices were adopted on the ground that they gave to the rubber growers a "fair" return on their investment. The continuance of prices averaging over 1*s.* 3*d.* was to bring the gradual removal of the restriction, since higher prices would afford profits to producers above the estimated "fair" return. The "fair" price was supposed to be based on the cost of production, estimated at about 10*d.* (at current exchange rates, 19 cents) a pound.[8]

During the six years of operation of the Stevenson Act, its original terms in favor of producers were made even more stringent. So long as the Act was helping not merely to maintain but even greatly to increase prices of rubber, as it did during the first three years of its operation, virtually nothing was done to increase its flexibility in the interest of consumers. But when, after a spectacular rise of prices in 1925, a sharp decline set in throughout 1926, the Act was promptly modified in the interest of the producers. For the twelve months beginning

[7] The terms of the Act have been frequently misquoted, and an impression has been created that 36 cents was the pivotal point and that the "fair" price was between 30 and 36 cents (1*s.* 3*d.* and 1*s.* 6*d.*).

[8] How this estimate was arrived at and whether in fact it allowed a "fair" return or something more than this are discussed on pp. 202-03.

November 1, 1926, the following revision of the former regulations was put into effect:

(1) If the average London price of rubber is less than 21*d.* but not less than 15*d.* per pound during any quarter, the percentage of standard production exportable at the minimum rate of duty for the ensuing quarter will be reduced by 10, unless the reduction is from the figure of 100 per cent, when reduction will be to 80 per cent.

(2) If the average price for any quarter is between 21*d.* and 24*d.*, no change will be made in the exportable allowance unless in each of three consecutive quarters the average price is over 21*d.*, in which case the exportable percentage for the fourth quarter will be increased by 10.

(3) If the average price for any quarter stands at 24*d.* or over, the exportable percentage will be increased by 10 for the ensuing quarter, except when the figure stands at 80 per cent, when advance will be made to 100 per cent of standard production.

(4) If the average price is below 15*d.* in any quarter, the exportable percentage in the ensuing quarter will be reduced to 60 per cent.

(5) If the average price in any quarter is over 36*d.*, the exportable percentage in the ensuing quarter will be advanced to 100 per cent.

(6) No provision is made for production at a rate above 100 per cent or below 60 per cent of standard production.

No announcement is made limiting the use of accumulated export permits or unused coupons.

Two main features are to be noted. First and most important, the basic price was raised far above the "fair" price provided in the original Act. Under the old it had been (at current exchange rates) from 23 to 29 cents; under the new it became from 43 to 49 cents. Thus the new pivotal points became 43 and 49 cents in place of the original 23

and 29 cents. Yet the original price had been established ostensibly with reference to the cost of production. Second, additional releases and restrictions of exports were to be made by amounts of 10 or 20 per cent instead of 5 or 10 per cent of the standard production. On a declining market this meant that exports were to be subjected to greater checks than before in order that prices might be more rapidly bolstered. In point of fact, beginning with November 1, 1926, successive restrictions were called for by these regulations until, for the quarter May-July, 1927, and thereafter, the permissible export stood at the new minimum of 60 per cent of "standard production."[9]

On November 1, 1928, the entire restriction scheme was abandoned. Owing partly to its increasing ineffectiveness, and partly to the opposition that it evoked, the Stevenson Plan gradually ceased to command the support of the British government. For nearly a year after the new restrictions came into effect the rubber market showed surprisingly little variation notwithstanding that stocks were increasing. But from the summer of 1927 the decline was resumed; and in spite of further restriction of exports in November, 1927, it still persisted.

[9] Owing, however, to the existence of coupons (export permits) held over from earlier quarters, actual exports continued high for some months after the new regulations came into effect. The actual tonnage by quarters, with percentages of standard production allowed (in parenthesis) was as follows: May-July, 1926, 78,200 tons (100); August-October, 1926, 98,300 tons (100); November-January, 1927, 96,900 tons (80); February-April, 92,300 tons (70). The *Economist* (London), May 14, 1927, p. 1010.

Criticism of the Stevenson Plan became more insistent. In the United States agitation against the measure had already resulted in futile representations to the British government; inquiries had been instituted by the Department of Commerce with a view to ascertaining what relief, if any, was available; and development of rubber planting in territory not under British control was being encouraged through American capital.

Finally, on February 8, 1928, the Prime Minister, Mr. Baldwin, publicly announced that the Civil Research Committee was to consider and advise upon future policy. No sooner was it announced that the question was to be referred to a capable and impartial committee than, as one member of Parliament put it, "the whole trade came to the natural conclusion that the scheme would be at an end when that committee reported." [10] In this they were correct. On April 4 it was announced by the government that the restriction scheme would continue unchanged until November 1, 1928, but would terminate on that date.

II. THE IMMEDIATE EFFECTS OF RESTRICTION

Such, in brief outline, are the outstanding historical facts. We come now to the task of examining in detail the results of the restriction scheme in the light of the objects, or avowed objects, for which it

[10] Mr. Hopkinson, M. P., in the House of Commons, February 13, 1928.

was imposed. We shall inquire first as to its more immediate effects in respect to output and price.

The Stevenson Act checked for a time, but did not halt, the increase of the world output of rubber. The Act did not actually decrease the output for several reasons. In the first place, production in the Dutch East Indies was rapidly increasing and was outside the jurisdiction of the Act. Such voluntary restriction as was practiced by British plantation owners in the Dutch East Indies affected the total Dutch output but slightly. In the second place, the production of wild rubber and the cultivation of rubber in India and French Indo-China remained unaffected by the Act, and from both of these sources the output, although small, increased. In the third place, the restrictions imposed were not so severe in operation as they appeared in the Act. Although the output of the British territories was limited in general terms to 60 per cent of standard production, the actual decrease effected by the law was much less than 40 per cent of the output of 1922. Partly this was because the output of 1922 was already below standard production by reason of the voluntary restriction before the law went into effect; so that a reduction of less than 40 per cent was sufficient to bring it to 60 per cent of standard. But in addition new areas were coming into production, and the Act made some allowance for this. Furthermore, the restriction did not apply to the smallest estates, and for a time there were other exceptions and mitigations. And finally, there were

smuggling [11] and certain other frauds that mitigated the effects of the restriction.

The table on page 184 shows the world rubber production by regions and the percentage of that production furnished by British possessions. A chart based on this table is shown on page 185.

The figures show that during the six years while the Act was in effect world production increased greatly despite the British restriction. Yet the increase would surely have been greater in the earlier years but for the Stevenson Act. The restriction became effective on November 1, 1922, and for two years, although world production increased, it increased very slowly. In 1922 the territories subject to restriction supplied 72 per cent of the plantation output or 67 per cent of the total world production of rubber. The Dutch East Indies in 1922 produced 27 per cent of the world output, and many of the estates there were owned and managed by British interests. Since 85 per cent of these British-owned plantations and some of those owned by Dutch interests voluntarily adopted the reduced scale of output, it is obvious that the 40 per cent reduction of output was calculated to effect a reduction of not less than 30 per cent of the potential world production. Estimates made by the Rubber Growers' Association and by trade papers indicated that the Restriction Plan kept 100,000 tons per year off the market in 1923 and 1924.

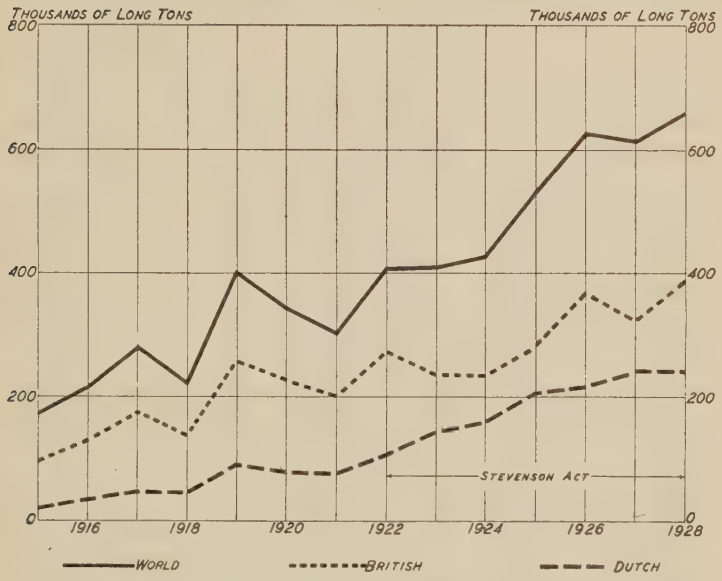
[11] It must be remembered that British Malayan rubber smuggled into the Dutch East Indies for shipment swells the apparent output of Dutch and not of British rubber.

WORLD RUBBER PRODUCTION, 1915-1928 [a]
(In long tons)

Year	Middle East		America			Africa	Total World Production	*British Middle East as Percentage of Total*
	British	Other	Brazil	Other	Guayule [b]			
1915.....	96,266	20,104	34,610	10,322	1,386	8,138	170,826	*56.35*
1916.....	128,153	33,689	30,997	10,595	283	10,372	214,089	*59.86*
1917.....	175,575	45,877	33,461	11,755	1,026	10,446	278,140	*63.12*
1918.....	137,124	43,937	22,303	7,399	1,799	7,122	219,684	*62.42*
1919.....	257,761	91,229	32,726	9,911	1,083	7,021	399,731	*64.48*
1920.....	226,389	78,717	23,216	6,288	982	6,402	341,994	*66.20*
1921.....	201,228	76,288	17,164	3,309	29	3,600	301,618	*66.72*
1922.....	271,686	107,834	19,542	4,116	275	2,941	406,398	*66.85*
1923.....	235,812	144,459	16,765	5,008	1,224	5,586	408,719	*57.70*
1924.....	233,703	160,228	23,165	2,017	1,373	5,416	426,178	*54.84*
1925.....	281,815	206,986	25,298	2,803	3,712	7,778	528,114	*53.37*
1926.....	367,647	216,519	24,298	2,998	4,306	8,713 [c]	624,481 [c]	*58.90*
1927.....	323,966 [b]	243,131	28,782	2,454	5,019	8,160 [c]	611,512 [c]	*52.98*
1928.....	385,523 [b]	240,658	21,129	1,490	3,076	6,124 [c]	658,000 [c]	*58.59*

[a] Holt, E. G., U. S. Department of Commerce, *Marketing of Crude Rubber*, p. 3.
[b] A particular variety, from Mexico.
[c] Including slight estimates.

PRODUCTION OF RUBBER, 1915-1928
(Calendar years)



The evidence points to a very marked effect of the Act upon prices in some years. For no period is it so conclusive that one can tell precisely how far the behavior of prices is attributable to the Act and how far to other influences. But it does suffice to raise a strong presumption that throughout a part at least of the six-year period of its operation, the Act resulted in much higher prices than would have prevailed in the absence of restriction.

The statistical basis for this conclusion is contained for the most part in the tables on pages 186 and 188-89 and in the chart on page 190. The table on page 186 shows, by quarters, the average

Prices of Rubber in London and Permissible Exports under the Stevenson Act [a]

(Prices, per pound, expressed in pence and converted to United States equivalents at current rates of exchange)

Quarter	Ending	Permissible Exports (As a percentage of "standard production")	Average Price		Nearest Turning Point under the Act (Pence)	Margin above or below Nearest Turning Point under the Act (Pence)
			Pence	Cents (Approximate)		
1st	Jan. 31, 1923	60	14.285	27	15	— .715
2d	Apr. 30, 1923	60	16.858	33	18	—1.142
3d	July 31, 1923	65	14.242	27	15	— .758
4th	Oct. 31, 1923	60	14.994	28	15	— .006
5th	Jan. 31, 1924	60	14.175	26	15	— .825
6th	Apr. 30, 1924	60	12.917	23	12	+ .917
7th	July 31, 1924	60	10.974	20	12	—1.026
8th	Oct. 31, 1924	55	14.632	27	15	— .368
9th	Jan. 31, 1925	50 [b]	17.998	35	18	— .002
10th	Apr. 30, 1925	55	19.356	39	18	+1.356
11th	July 31, 1925	65	38.469	78	...	...
12th	Oct. 31, 1925	75	43.269	88	...	...
13th	Jan. 31, 1926	85	46.709	95	...	...
14th	Apr. 30, 1926	100	28.013	57	...	...
15th	July 31, 1926	100	21.0017	43	21	+ .002
16th	Oct. 31, 1926	100	20.199	41	21	— .801
17th	Jan. 31, 1927	80	19.265	39	21	—1.735
18th	Apr. 30, 1927	70	19.696	40	21	—1.304
19th	July 31, 1927	60	18.165	37	21	—2.835
20th	Oct. 31, 1927	60	16.620	34	21	—4.380
21st	Jan. 31, 1928	60	19.023	39	21	—1.977
22d	Apr. 30, 1928	60	12.604	26	21	—8.396
23d	July 31, 1928	60	9.154	19	21	—8.846

[a] Sources: *Bulletin of the Rubber Growers' Association*, Vol. VIII, 1926, p. 578, and the *Economist* (London), May 14, 1927. Under the rules in force in 1926-1928, 18 pence is not a turning point, the limits of this price range being 15 and 21 pence.

[b] Section 4 of the Act provided that "if that reduction [to 55 per cent] is not effective in raising the average price over the following three months to 1*s.* 3*d.*, then it shall be reduced to 50 at the end of the three months, and so on by reductions of 5 per cent at the end of each three months until that average price is secured.

prices of rubber in London and the permissible exports for each quarter (in terms of percentage of "standard production") as stipulated in the Stevenson Act.

The table on pages 188-89 and the chart on page 190 show the course of rubber prices at New York from January, 1921, through December, 1929. In the chart London prices by quarters from November 1, 1922 to July, 1928, are also shown. Two price series are given for New York. The spot prices may be taken to indicate the current trend of the rubber market, but they do not show the trend of prices on contract for future delivery. For this purpose we have taken the average import price as shown by the official import figures (based on foreign valuation) and adjusted it to approximately a New York basis by making rough allowance for shipping and other costs.

The course of prices during the period covered by the chart may be best interpreted by dividing the whole period into shorter periods. From January to September, 1921, we have a period of rapidly falling prices followed by fairly stable prices up to September, 1922. These movements are apparent both in the adjusted import prices and in the spot prices. The movements of the spot prices, however, are more marked and tend to precede by some months the movements of import prices. The sharply falling prices and the period of prices at bottom level explain sufficiently the demand for restrictive legislation.

From September, 1922, to July, 1924, we have a rapidly rising, followed by slowly declining, market.

SPOT AND IMPORT PRICES OF RUBBER IN NEW YORK, BY MONTHS, FOR THE YEARS SPECIFIED
(In cents per pound)

Month	1921			1922			1923		
	Spot [a]	Import [b]	Difference [c]	Spot [a]	Import [b]	Difference [c]	Spot [a]	Import [b]	Difference [c]
January	19.2	31.4	—12.2	18.8	17.0	1.8	32.7	19.9	12.8
February	18.2	33.4	—15.2	16.1	18.2	— 2.1	35.1	23.8	11.3
March	17.1	26.1	— 9.0	14.5	19.1	— 4.6	34.2	29.5	4.7
April	16.6	23.1	— 6.5	16.0	18.8	— 2.8	32.5	33.5	— 1.0
May	16.5	19.0	— 2.5	15.2	17.2	— 2.0	27.4	33.1	— 5.7
June	13.1	18.8	— 5.7	15.1	16.6	— 1.5	26.9	32.2	— 5.3
July	13.5	17.2	— 3.7	14.7	16.5	— 1.8	26.1	31.1	— 5.0
August	14.2	16.9	— 2.7	13.9	16.5	— 2.6	28.8	29.2	— 0.4
September	14.8	15.8	— 1.0	14.4	16.0	— 1.6	29.0	27.1	1.9
October	15.9	16.0	— 0.1	19.8	15.7	4.1	26.9	28.3	— 1.4
November	17.9	16.9	1.0	23.9	16.4	7.5	27.1	28.5	— 1.4
December	19.8	16.3	3.5	27.4	17.2	10.2	26.6	27.5	— 0.9
	1924			1925			1926		
January	25.9	26.6	— 0.7	36.7	32.4	4.3	79.5	78.4	1.1
February	25.3	27.0	— 1.7	36.0	35.5	0.5	62.3	81.8	—19.5
March	22.8	27.1	— 4.3	41.0	35.9	5.1	59.0	76.8	—17.8
April	22.5	26.4	— 3.9	43.6	36.2	7.4	51.3	65.0	—13.7
May	19.9	25.0	— 5.1	58.4	38.6	19.8	47.6	57.4	— 9.8

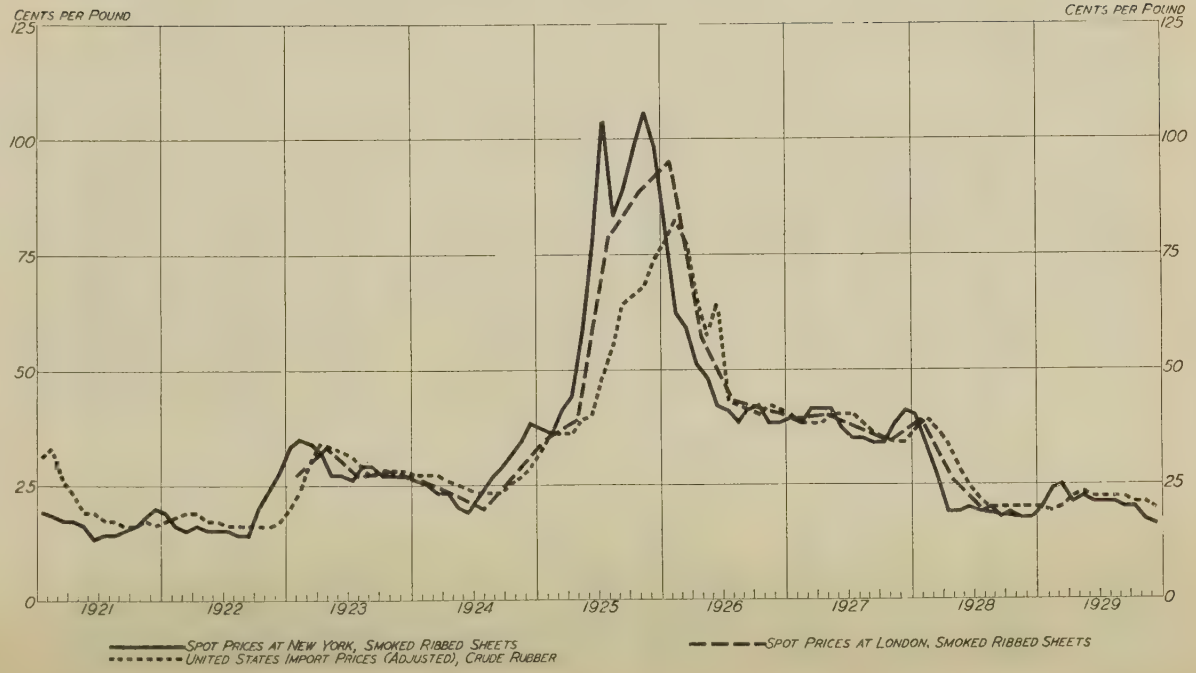
June	18.8	24.5	— 5.7	77.3	40.0	37.3	43.0	63.9	—20.9
July.....	22.2	23.1	— 0.9	103.2	48.4	54.8	41.0	43.2	— 2.2
August	26.2	22.6	3.6	83.0	55.2	27.8	39.0	42.2	— 3.2
September .	27.6	22.7	4.9	88.9	64.1	24.8	41.0	41.3	— 0.3
October....	31.1	25.3	5.8	98.0	66.5	31.5	42.5	40.4	2.1
November..	34.3	27.3	7.0	104.8	68.5	36.3	40.2	41.8	— 1.6
December..	37.9	29.4	8.5	98.5	74.0	24.5	38.0	41.3	— 3.3
	1927			1928			1929		
January ...	38.8	39.9	— 1.1	40.2	36.6	3.6	20.1	19.7	0.4
February ..	38.3	38.4	— 0.1	32.7	38.8	— 6.1	24.0	19.2	4.8
March.....	41.0	38.1	— 2.9	26.8	37.2	—10.4	24.6	20.0	4.6
April.....	40.9	38.1	2.8	19.0	34.1	—15.1	21.2	22.5	— 1.3
May.....	40.8	39.9	0.9	19.0	29.4	—10.4	21.5	23.2	— 1.8
June	37.3	39.6	— 2.3	19.6	24.7	— 5.1	20.6	22.1	— 0.5
July.....	34.9	39.5	— 4.6	19.4	22.2	— 2.8	21.3	21.6	— 0.3
August	35.1	37.9	— 2.8	19.5	20.4	— 0.9	20.6	21.8	— 1.2
September .	33.7	35.9	— 2.2	18.5	20.5	— 2.0	20.4	21.7	— 1.3
October....	34.3	34.8	— 0.5	18.8	20.4	— 1.6	19.7	20.9	— 1.2
November..	37.6	33.7	3.9	18.3	20.2	— 1.9	16.6	20.7	— 4.1
December..	40.6	34.3	6.3	18.0	20.0	— 2.0	16.1	20.3	— 4.2

[a] Average prices in New York of plantation ribbed smoked sheet. Compiled from *India Rubber World.*

[b] The quotations are for crude rubber, and two cents per pound has been added to original prices as an allowance for freight, insurance, etc. Compiled from *Monthly Summary of Foreign Commerce of the United States.*

[c] A minus sign denotes that the import price is greater than the spot price.

PRICES OF RUBBER, 1921-1929



The rapidly rising market is to be explained rather by an apprehended than an actual shortage. The mere threat of the Act led industrial consumers to bid against one another for their raw material. It will be noted that the rise in spot prices anticipated the Act by two months. The slow decline in prices from the winter of 1923 to the summer of 1924 suggests that the shortage was in fact not so great as had been anticipated. This interpretation is strengthened by the table on page 184. It will be remembered that the Act was predicated on a decline of some 30 per cent in world production. The table shows that, far from declining, world production actually increased from 406,000 tons in 1922 to 409,000 tons in 1923 and 426,000 tons in 1924. (See also page 182 for other reasons why the restrictions were not so severe as anticipated during this period.)

We now come to the most spectacular periods in the history of the Stevenson Act: the boom period from the summer of 1924 to the winter of 1925-26 and the subsequent slump period from then to the end of the restrictive policy in the fall of 1928. By the middle of 1924 the restrictions under the Act began to be severely felt. The permissible exports were reduced to 55 per cent of standard production during the quarter ending October 31, 1924, and again to 50 per cent during the quarter ending January 31, 1925, and were not raised to over 55 per cent until after the quarter ending April 30, 1925. Moreover, the demand for rubber was gaining in strength, partly because users of rubber, in the light

of the restrictions, were uneasy about their supplies, partly because of the rapid growth of the automobile industry as a whole, and partly because of the advent of a specific feature of that industry, namely, the balloon tire, which requires considerably more rubber than the ordinary tire. Hence in spite of the fact that world production actually increased from 426,000 tons in 1924 to 528,000 tons in 1925, prices soared to unprecedented heights, reaching a peak of 104.8 cents per pound in November, 1925. At this point the tide turned, and prices began to fall at first precipitately, then more moderately, and again precipitately until, when the Act went out of effect, they were on about the level at which they stood when the Act first went into effect.

We have accounted for the spectacular rise. How are we to account for the equally spectacular fall? It will be noted that both the rise and fall were obviously greatly influenced by the psychology of buyers. There is a striking resemblance on a larger scale between the period we are now considering and that extending from September, 1922, to June, 1924. In both, the adjusted import prices lagged several months behind the spot prices in London and New York. Industrial consumers anxious to secure their raw material and speculators, foreseeing a shortage, forced up the spot price earlier and to a much higher level than would appear to be warranted by the course of adjusted import prices, that is, approximately the prices obtained by the growers and presumably based on contracts made some months in advance. And when the peak of prices

was reached in November, 1925, the bottom dropped out of the spot market earlier and the drop in spot prices was more precipitate than the corresponding slump in the import market. The peak of spot prices was reached in November, the peak of import prices was not reached until the following February. The spot price was 36.3 cents per pound higher than the import price in November; by May of the next year it was 20.9 cents lower.

We are now in a position to discuss the reasons for the drop, first in spot and later in import prices. In 1925, in spite of the British restrictive policy, world production increased to 528,000 tons from 426,000 tons the preceding year, an increase of 24 per cent; and an increase of nearly equal tonnage, already foreseen in November by rubber statisticians and speculators, was in prospect for the following year. This forecast was in fact realized by an output of 624,000 tons. During the quarter ending October 31, 1925, permissible exports had reached 75 per cent of standard production. This was increased to 85 per cent the following quarter and to 100 per cent for the quarter ending April 30, 1926, and the figure remained at 100 during the remainder of the year. Moreover, as was noted in the footnote on page 180, export coupons held over from previous quarters made possible exports in excess of the percentages provided for in the Act.

While from the standpoint of supply these changes unfavorable to price maintenance were taking place, changes equally unfavorable showed themselves from the standpoint of demand. The United States,

the greatest rubber consuming country in the world, met the high price situation by increased use of reclaimed rubber. It was estimated that by this means the demand for crude rubber was reduced 15 per cent. In 1927, of the total rubber consumption of the world the United States alone consumed 48 per cent in the form of crude rubber and 24¼ per cent in the form of reclaimed rubber.[12]

An attempt was made by the revision of the Act late in 1926 to halt the downward trend of prices, but with only slight success. Through this revision permissible exports were reduced progressively in successive quarters from 100 per cent of "standard" production first to 80, then to 70, and then to 60, the percentage in force when the Act first went into effect. But conditions were not favorable. The power of the British, acting alone, to regulate prices was waning. As shown by the table on page 184, owing to the restrictive policy the part played by the British in world production decreased from nearly 67 per cent in 1922 to less than 53 per cent in 1927. While British production was held in check by self-imposed restriction all other sources of supply were taking advantage of whatever improvement in price was effected by the Act to increase their output.

By 1928 it became apparent that the Stevenson Act was doing the British rubber interests more harm than good and it was repealed, the repeal to

[12] Vagts, Alfred, "Der Stevenson-Plan: Glück, Ende, und Wirkungen, II," *Zeitschrift für Geopolitik*, 5 Jahrgang (1928), p. 825.

be operative in November of that year. When announcement of the forthcoming repeal was made in February, the sharp decline in prices, which had been somewhat held in check by the changes in the pivotal points in 1926, was resumed and the drop again became precipitate.

The preceding analysis has been made in terms of the large economic forces which govern price and which were known to be operative during the period covered. Of these forces the limitation of supply under the Stevenson Act was only one. For the most part the other forces would have been operative had there been no Stevenson Act. It is significant that at the close of the period the price of rubber was very close to what it had been at the beginning and that during the continuance of the Act it was at all times higher, at some times very much higher, than this figure. Just how much of this increase in price was due to the Act and how much to other factors it is impossible to say. The general revival of business in the years following 1921, the enormous development of the automobile business, the advent of the balloon tire, and a more or less speculative market during so dynamic a period of the industry would have been factors calculated to raise prices even if the Stevenson Act had never been thought of.

Yet it is impossible to study the course of prices from the summer of 1922 to the late fall of 1928 without being convinced that the Stevenson Act was an important factor in making it. The connection between successive phases of the Act and the

course of prices is too close to permit of any other interpretation.

Looking at the period as a whole, the chart suggests that while the Act did influence prices through limitation of output, it influenced them also and perhaps to an even greater extent through its psychological effect on industrial consumers. Evidence of the latter influence is found in the extreme fluctuations of both spot and import market quotations, and in the anticipation of import values by the spot market.[13] Consumers were governed in their buying not only by their estimates of rubber supplies at the time of purchase but by the threat of insufficient supplies in the future which the Act always held over them. And when it became apparent that the Act was becoming impotent to accomplish its purpose they went to the other

[13] On the other hand, it has been argued that the Restriction Act advertised the surplus of rubber and that the British assurances that the price would not go above 36 cents, or not much above, led manufacturers to carry smaller stocks than they had been accustomed to do, and thus produced a smaller demand and prevented a greater rise of price. This argument assumes that the Restriction Act was the cause of the carrying of smaller stocks. In fact, however, the smaller stocks are amply explained by the tremendous losses of the rubber manufacturers on the stocks which they had held in 1920. These losses impaired their financial ability to carry large stocks and converted them—as similar losses converted so many manufacturing and commercial houses—to the policy of carrying minimum rather than maximum stocks. See *India Rubber World* (New York), 1927, Vol. 75, p. 202. An extensive analysis of the situation as regards stocks carried by American business may be found in Lyon, Leverett S., *Hand-to-Mouth Buying* (Institute of Economics Series), Chapters XI-XIV.

extreme. If it was the purpose of the Act to "stabilize" prices, then in this respect it was a dismal failure. If, on the other hand, its purpose was to increase the profits of the rubber growers, it was effective. The chairmen of the plantation companies, in their annual reports for 1923, were enthusiastic in their praise of the Act, and they attributed to it the rise in the price of rubber.[14] Whether they were correct in apparently attributing the whole of the rise to the restriction scheme may be questioned. But their opinion, even if a mistaken one, is important in that it would have encouraged further attempts at restriction in rubber and in other products.

As evidence of how an appetite may grow with indulgence, it will be observed that the average spot price in July, October, November, and December, 1925, was three times as great as the price considered "fair" when restriction was first adopted, and that even the decrease below 50 cents in May, 1926, which led to a more drastic revision of the Act, left the price over 50 per cent higher than the so-called "fair" price when the Act was first proposed.

It will also be observed as evidence of the important part played by factors other than the Stevenson Act in shaping the course of prices that maximum increases in the percentage allowed to be exported, namely 10 per cent additional on May 1, August 1,

[14] *Report of the Rubber Growers' Association*, 1924, p. 10. See also the annual reports of the rubber plantation companies, 1923-1927.

and November 1, 1925, had little or no apparent influence in checking the rise of prices, nor did the restrictions on exports in the following year arrest the decline. It would seem that physical changes in supply arising from the increasing or decreasing quotas allowed for export were less potent to affect prices than was the changing psychology of the "street." Both 1925 and 1926 were characterized by "run-away" markets, the former a sellers' market, the latter a buyers'. Yet doubtless the existence of the Act, with its possibilities, now of an arbitrary increase in supply and now of an arbitrary decrease, greatly contributed to this mob psychology. Such a mob psychology is one phase of what in popular usage is called speculation, and in this sense of the word the Stevenson Act contributed to a vast speculation in rubber.

Another phase of this type of speculation was manipulation of the market. Market manipulation is seen in the small margin between the average price for a quarter and the turning point permitting an increase of exports. During the first nine quarters of the operation of the Act it became increasingly clear that the London market was controlled by interests intent on allowing no expansion of production. In one quarter after another the market was manipulated to get the maximum price consistent with running no unnecessary risk of bringing further supplies upon the market. In two cases, including the ninth quarter when the shortage was already in sight, turning points were avoided by the narrowest of margins—.006 and

.002 pence, respectively. Such speculation and price manipulation were certainly fostered by the Restriction Act.[15]

III. APPRAISAL OF THE AIMS AND RESULTS OF RUBBER RESTRICTION

We turn now to a consideration of the objects of the restriction scheme, the extent to which these objects were actually realized, and the results that accompanied the endeavor to attain them.

The immediate object of restriction was to restore prosperity to the rubber industry. In 1921 and 1922 it was believed by many that the plantation rubber industry was threatened with disaster, and it was therefore alleged that the very future of rubber supplies for the world was in jeopardy. The growers

[15] The danger of speculation was one of the arguments which the British manufacturers had made against the rubber restriction scheme. Their argument is summarized in the *Bulletin of the Rubber Growers' Association,* March, 1923, pp. 130-31, as follows: "It [the restriction scheme] was promulgated on *ex parte* evidence, and consequently the departmental report, on the basis of which the legislation was framed, was inaccurate and inconsistent, and would defeat its avowed object of stabilizing prices; further, it was economically unsound for Government help to be given to an industry which up to the present, had been conducted without regard to sound financial administration; the continuance of legislative restriction inevitably meant the encouragement of speculation on the rubber market; the profiteering of plantation companies under the aegis of the British Government; the crippling of the chances of development of the rubber manufacturing industry; a premium being placed upon inefficient administration of plantations; the creation of an unfortunate international position; and the creation of a precedent for initiating legislation for the restriction of supplies of raw material."

had shown themselves incapable of regulating supply. Overplanting had followed the boom of 1910 and brought upon them the difficulties of 1921-22; whereupon they had ceased planting and had begun to urge upon consumers the danger of shortage after 1930. Prices had sunk to a low level, and the large surplus stock on hand seemed to portend several lean years for the industry unless drastic measures were taken to get rid of it.

The situation in the industry appears, however, to have been less precarious, and the threat to future rubber supplies less serious, than had been alleged. The report that the industry was on the verge of ruin had been given wide and emphatic publicity, but it appears to have been exaggerated. Without going far into the field of what has been called "hypothetics, or the science of things as they might have been," we may point out certain facts concerning the rubber situation in 1922 and examine briefly certain speculations concerning what would have happened if the British government had not intervened.

The plantation rubber industry had previously been exceedingly profitable and no failures occurred in Malaya even in 1921-22. In the fourteen years ending with 1922, including the two years of depression, 52 representative rubber companies made an average return of 26 per cent on their issued capital and paid average annual dividends of 22 per cent.[16]

[16] Figart, D. M., U. S. Department of Commerce, "The Plantation Rubber Industry in the Middle East," *Trade Promotion Series* No. 2, 1925, p. 9.

This calculation does not take into account the watering of stock which is known to have taken place in many companies.[17] Obviously, therefore, conservative companies were in a position to enter the period of depression with substantial reserves.

A high rate of return has been represented as necessary to attract capital into so distant and dangerous a field. In a quarter of a century, however, the only serious and widespread danger that had materialized was the overproduction resulting from the headlong movement of capital into this so-called "risky" business. By 1921-22 the experimental stage of the industry had been "left a very long way behind."[18] Certainly the market did not at that time rate the risk as requiring a 20 per cent return. And even if it had done so prior to restriction, it could scarcely continue properly to do so after the government had eliminated the danger of overproduction and hence much of the risk by which the industry was attended.

Nor was the "emergency" so sudden and unforeseeable as it was made to appear. During the War the British government had suspended the granting

[17] For instance, in declaring the modest dividend of 7½ per cent in 1923, the chairman of the Linggi Plantations frankly remarked that of course this was a dividend of 30 per cent on the capital actually paid in by the stockholders. The *Times* (London), May 8, 1923.

[18] Mr. H. Eric Miller to the stockholders of the United Serdang (Sumatra) Rubber Plantations. The *Times* (London), January 19, 1927.

of lands in Malaya for rubber plantations.[19] Hence planting in British Malaya had almost ceased during that period and companies whose plantations were just beginning to bear in 1921 and 1922, and which were not in a position to have reserves, were a negligible part of the industry and constituted no problem. The growth of the industry was owing more to expansion of existing companies than to organization of new ones, and the existing companies had been aware for some time of the approaching situation. Information on acreages planted from year to year was available, and the company managers had known for several years that they were approaching such a volume of production that unless demand increased rapidly and was well maintained prices would necessarily be low.

But even for such companies the gravity of the situation was being partially relieved by a decrease in costs of production. The costs had been very high before the War because of the natural tendency of a rapidly expanding and very profitable business to expend money without careful scrutiny. High

[19] British capital was not available and the government did not wish foreign capital to obtain the advantage of going into the business at a time when British capital could not do so. The British prohibition was directed primarily against American investments, since the Dutch naturally invest in their own colonies, and the other capitalistic nations required all their capital for the War. The British government was possibly influenced by the conviction that an overproduction of rubber was approaching. Dutch plantings were heavy in 1917, 1918, and 1919.

costs were, of course, characteristic of this as of other industries during the War and the two years following. In 1921 and 1922, however, the plantation managers were able to introduce many economies. Carefully compiled figures show that the "all-in" or total costs of 64 Malayan companies were 42 per cent less per pound of rubber in 1922 than in 1920.[20] Such statistics as are available indicate that even the low prices of 1921 and 1922 were not below the cost of production of most of the companies. Indeed many of them actually continued to pay dividends.[21]

Even in Great Britain public opinion was far from unanimous in holding that the situation for the rubber plantations in 1922 was so desperate as it was alleged to be. Such powerful journals as the *Daily Telegraph* (London) and the *Times* (London) took occasion to point out that costs had been greatly reduced; that practically all companies were working at a profit by the end of 1922; that only a few weak companies were on the verge of failure when restriction was adopted; and that in all

[20] U. S. Department of Commerce, *Trade Promotion Series* No. 2, p. 75.

In 1921 the 110 companies (chiefly Malayan) given in Rickinson's *Rubber Companies' Position* had costs ranging from 6½ to 20½ pence; but 60 per cent of their total output was produced at 12 pence or less. In 1922, the costs of these same companies ranged from 5½ to 14 pence, and 60 per cent of their output was produced at 9 pence or less. These are "all-in" costs, including all expenses of production and delivery to London, but including nothing for dividends.

[21] See Rickinson's *Rubber Companies' Position* for 1921-1923.

probability their elimination would have been a healthy thing for the industry.[22]

[22] On January 15, 1923, the *Daily Telegraph* said: "Speaking generally, the cost of producing rubber has been so surprisingly reduced that with the present price of over 1*s.* 3*d.* per pound for the commodity, practically all the companies are now working at a profit. *There can be few industries that have come through the world depression with so little loss as the rubber industry.* Not a single rubber company has disappeared, and there have been *fewer appeals for capital and less numerous reconstructions than in other industries of equal magnitude.*" [Our italics.]

In its Annual Financial and Commercial Review of February 10, 1925, the *Times* reviews the situation in part as follows: "When restriction was introduced, a number of companies—forming a comparatively small percentage—were on the point of falling out of production, owing to the unremunerative price of rubber. This group was comprised of the smaller and less efficient, badly financed, and economically weak companies—largely the inevitable legacy of 'boom' conditions; they formed that part of an industry which must always languish when 'boom' conditions come to an end. Restriction frustrated the eliminative work of the price factor—and prevented the reorganization and amalgamation of those companies from which, it is indicated, the large excess of production might have emanated. On these grounds it is well to conclude that, in the absence of restriction, much of the undesirable element of production would have gone out, unless basic laws of economics were to be flouted. Had this been the case the industry would, at the end of 1922, have moved towards gradual recovery on a sounder, cleaner basis, especially as the increase in consumption has been fairly persistent."

That this recognition of the unsoundness of the position of certain rubber companies was not mere wisdom of hindsight is disclosed by a featured article of the *Times* of August 19, 1921, which said: ". . . Attention has recently been drawn to the excessive profusion of rubber companies and to the economies that could be effected by extensive amalgamation. This profusion is the result of the big profits made without efficiency of management while demand was greatly

It seems clear, therefore, that the government cherished an exaggerated idea of the distress of the industry in 1922.[23] When the Restriction Act was put in force the demand for rubber had revived, and in spite of the large stocks on hand the price had

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in excess of supply, and there are naturally a considerable number of unsound enterprises that will be, and should be eliminated by the pressure of circumstances, now that the more healthy position has been reached in which the industry is able to supply at competitive prices any probable world demand."

[23] Nevertheless at least one of its officials at the time the restriction plan was adopted continued as late as 1926 to defend the action of the government. Sir Robert Horne, who was Chancellor of the Exchequer at the time the rubber Restriction Act was put in force, and who regards himself therefore as "in as good a position as any unofficial person to put forward a point of view," illustrates the manner of thinking which actuated the government. In a letter to the *New York Times* (published January 3, 1926) he defended the Restriction Act and attacked its American critics. Attention is called to the manner in which the ruin of the industry increases from sentence to sentence, as indicated by our italics.

"There had been a great slump in the price of rubber in 1920, which was followed by a protracted depression. Enormous stocks of surplus rubber had accumulated. The prices at which rubber was being sold were, *in many cases*, not paying for the production. The vast capital which had been put into the rubber industry was in jeopardy, and ruin stared *a great many* of the planters in the face. *It was commonly anticipated* that *the majority* of the rubber plantations would fall back into a condition of jungle and that the work of many years in building up the industry would be wiped out.

"It has, I think, come to me that at the time it was instituted it stopped a rot which would, in my view, have *ended in disaster for the rubber trade*."

already risen.[24] At what point the price would have been maintained is, of course, a matter that cannot now be determined. There would have been less stimulus to production outside British Malaya. There would have been less severe tapping on estates in the non-restricted area (particularly on the plantations owned by natives in Sumatra and Borneo), smaller use of wild rubber, and less resort to reclaimed rubber. Meanwhile, with demand increasing, better prices for new rubber than had prevailed in 1921-22 would certainly have come to pass. That prices without restriction would have been so low as to cause a considerable portion of the rubber plantations to revert to jungle is, therefore, an assumption without ground.

To summarize: the rubber companies had made exceptionally great profits for many years; the decline in the price of rubber was clearly forecast and only reckless companies faced the depression of 1921-22 without strong reserves. Cost of production went down as price fell so that no companies failed during the depression, and many were able to continue dividends. The price turned upward in the summer of 1922 and the depression was mitigated two months before the government interfered.[25] The actual and prospective growth of

[24] That is, the spot price. The import price did not rise appreciably until after the Act went into effect. The rise in the spot price may have been due to speculators banking on the probability that the Act would be passed and would produce a shortage. A committee had been considering restriction all summer. See p. 174.

[25] But see the preceding footnote.

demand gave grounds for hope for the continuation of a price which would cover the cost of production of most, if not all, of the companies and allow the better managed companies to continue to pay dividends. It follows that the danger of an ultimate shortage of rubber, advanced as a justification of the Stevenson Act, was greatly exaggerated.

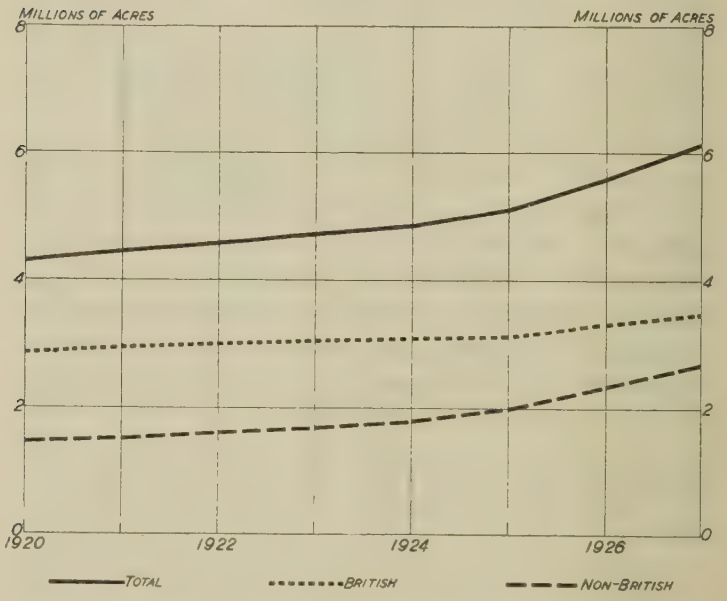
The Restriction Act stimulated rubber production in other countries and probably, in the long run, world production. The rubber shortage feared by manufacturers and the prospect of a high price, both logical consequences of restriction, stimulated plantings in regions not affected by the Act. There was considerable discussion of the possibilities of the Philippine Islands, and the Firestone Rubber Company actually began acquiring and developing large rubber holdings in Liberia. Even more notable was the extension of acreage planted to rubber in non-British territory in the Middle East. This is shown by the table on this page and the chart on page 208.

ESTIMATED RUBBER ACREAGE IN THE MIDDLE EAST, 1920-1927
(End of the year figures, in thousands of acres)

Year	British	Non-British	Total
1920	2,868	1,446	4,314
1921	2,934	1,507	4,441
1922	2,977	1,593	4,570
1923	3,027	1,683	4,710
1924	3,076	1,778	4,854
1925	3,134	1,987	5,121
1926	3,294	2,322	5,616
1927	3,484	2,679	6,163

The relatively greater increase in non-British acreage as compared with British after 1922 is obvious. From 34.8 per cent of the total rubber acreage in the Middle East in 1922 it increased to 43.5 in 1927. It was 53.5 per cent of the British in 1922 and 76.9 per cent in 1927. Although in the

RUBBER ACREAGE IN THE MIDDLE EAST, 1920-1927
(Calendar years)



earlier years the Act undoubtedly tended to check the increase in world production, the ultimate effect was probably the reverse. Production—or at least productive capacity—is presumably greater today than it would have been but for the Act.

The Restriction Act resulted in large profits for

rubber producers. Even had the Act done nothing more than to stabilize the price at the so-called "fair price" level established in the beginning, it would have resulted in large profits. As already pointed out, the "fair price"—the limit beyond which there were to be progressive releases of exports—was set at 15*d.* This was based on the cost of production, estimated at about 10*d.* a pound, whereas in fact costs for the bulk of the producers were below 10*d.* If the 110 companies included in Rickinson's *Rubber Companies' Position* be representative, a price of 12*d.* covered the cost of production [20] for about 98 per cent of the crop in 1922 and gave about 2*d.* a pound above costs to 83 per cent of it. That is to say, virtually all of the crop in 1922 could have been produced at a cost of no more than 12*d.* a pound; and 83 per cent of it could have been produced at or below the estimated cost of 10*d.* used as the basis of the so-called "fair price" of 15*d.* As no relaxation of the restriction was to take place until the price reached 15*d.* it was evident that, should the "fair" price be maintained under the Act, most of the companies would receive above costs at least 5*d.* a pound, or in excess of 50 per cent of the estimated cost. That they should have been able subsequently, therefore, to declare what the shareholders consider a "fair" dividend, namely, 15 or 20 per cent, is not surprising.

It is true that this liberal margin was defended on the ground that restricted output would increase

[20] Cost of production in the rubber industry means working costs, allowing nothing for interest or dividends.

the cost of production per pound. But again, if we use Rickinson's figures, we find that the costs for 1923 were about 1*d.* a pound higher for the low-cost companies (whose costs ranged from 5½ to 7½*d.* a pound in 1922) but increased scarcely at all for the high-cost companies. Almost 80 per cent of the total was still produced at a cost of 10*d.* or less, and the highest cost had fallen from 14 to 12½*d.* Even at its inception, therefore, the Act accorded generous terms to the producers.

But, as we have seen, the Act was instrumental, in succeeding years, in getting for the producers prices far above what had originally been defined as a fair price. What would have been the exact course of prices, and therefore of profits, in the absence of restriction cannot, as we have said, be told. There can be no doubt, however, that the enormous profits made in 1925 and 1926 would not have been possible but for restriction.

The table on page 211 shows the increase in profits in 1925 and 1926 over those of preceding years. It will be seen that the advance in these two years was very striking.

From the first section of the table it will be observed that the Dutch companies were actually operating at a loss in 1921 and made but small profits in 1922. In these years the earnings of the British companies were likewise low. Following the adoption of the Stevenson Act, however, the earnings of both increased. But it was not until 1925 that the greatest increase came. In that year the rate of return for the Dutch companies was

EARNINGS AND DIVIDENDS OF BRITISH AND DUTCH RUBBER-GROWING COMPANIES

I. Consolidated Earnings of Certain Companies [a]

Item	1920	1921	1922	1923	1924	1925
DUTCH COMPANIES						
Paid up capital (thousand florins)	72,500	83,860	75,997	77,674	90,020	123,575
Net profits (thousand florins)	863 [b]	6,724 [b]	1,971	7,259	10,162	26,769
Profits as per cent of capital	1.2 [b]	9.1 [b]	2.6	9.3	10.3	21.6
BRITISH COMPANIES						
Paid up capital (thousand pounds)	35,053	43,067	44,490	48,906	47,818	49,896
Net profits (thousand pounds)	4,012	437	1,652	3,324	3,846	11,870
Profits as per cent of capital	11.4	1.0	3.7	6.8	8.0	23.8

II. Dividends Paid by Certain British Companies [c]

Name and Amount of Share	1923	1924	1925	1926
Anglo-Malay (£1)	6%	7%	20%	17½%
Chersonese (2/)	10	10	20 5/6	18¾
Highlands, etc. (£1)	7½	10	37½	32½
Linggi (£1)	7½	7½	32½	25
London Asiatic (2/)	7½	10	40	35
Selangor (2/)	12½	12½	50	35
Sunger Kapar (2/)	10	12	55	37½
United Serdang (2/)	10	12½	25	40

[a] The Dutch companies account for about 22 per cent of the Dutch East Indian output. Data are from the *Economist* (London), May, 21, 1927, p. 1070.

[b] Net loss.

[c] *Ibid.*, July 30, 1927, p. 204.

21.6 per cent, for the British companies 23.8 per cent. The manner in which the Stevenson Act served to enhance the dividends of certain British companies is shown in the second section of the table. It will be seen that dividends, which had ranged from 6 to 12.5 per cent in 1923 and 1924, jumped to a range of from 17.5 to 55 per cent in 1925 and 1926.

Turning now to the other side of the picture, let us consider the burden that resulted from the Restriction Act. Whatever the amount of the burden, it was not, as we have seen, mitigated by any ultimate gain that may have come from "saving" an industry that was erroneously alleged to be on the brink of disaster. But was the burden in fact great or small?

The Restriction Act undoubtedly imposed a large burden upon foreign consumers. Without pretending to measure the burden with any greater precision than was possible in regard to prices and profits, we may safely conclude nevertheless that it was heavy. If the opinions of the rubber growers are accepted, namely, that restriction caused the higher prices of 1923 and 1924 in comparison with 1921 and 1922—an increase roughly of 10 cents a pound—it follows that American importers paid in 1924 about 140 million dollars more for their 1,400,000,000 pounds of rubber than they would have paid had the government refrained from interfering. In subsequent years prices were much higher, and the sums paid by American importers above what they would have paid had what was

regarded as a "fair price" in 1922 prevailed, amounted for the two years 1925 and 1926 to no less than 400 million dollars, based on the import prices of rubber in the United States. The question that now arises is: By whom was this burden borne?

In the United States the burden was in part absorbed by the manufacturers and in part passed on to final consumers. The wide fluctuations of prices have already been noted (see page 190). In a general way it would appear that during periods of rising prices the manufacturers were able to pass on the burden to final consumers. Far from being injured they appear actually to have benefited. In periods of falling prices, however, they appear to have been obliged to absorb much of the burden themselves. These inferences are based on a comparison of the price table on pages 188-9 and chart on pages 188-90 with the table of profits of American rubber companies shown on page 214.

The probable effect of the Stevenson Act on prices was anticipated even before the Act went into effect and caused a temporary price rise greater than was justified by the actual statistical position of rubber. This first peak was reached early in 1923. From this peak until the middle of 1924 the price of rubber declined. During 1923 while prices were declining rubber companies show small profits—two, indeed, show a loss. Aggregate profits were $29,243,000.[27]

[27] There is some evidence that 1923 was a severe year for the American rubber industry. In January and February, 1923, Sir Stanley Bois, Mr. P. J. Burgess, and Mr. H. Eric

PROFITS OF AMERICAN RUBBER COMPANIES, 1923-1928 [a]
(In thousands of dollars, years ending December 31)

Company	1923	1924	1925	1926	1927	1928
Ajax Rubber Co., Inc.	560 [b]	664	1,005	293 [b]	1,991 [b]	2,064 [b]
Dayton Rubber Manufacturing Co.	143	285	440	809 [b]	1,066	634
Firestone Tire and Rubber Co. [c]	6,105	8,117	12,800	6,122	13,281	6,572
Fisk Rubber Co.	2,584 [c]	2,737 [c]	6,109 [c]	3,354 [c]	2,621 [d]	8,791 [b]
General Tire and Rubber Co. [e]	1,160	1,466	2,130	441	2,505	1,790
B. F. Goodrich Co.	3,025	8,823 [f]	12,744 [g]	5,065	11,780	3,513
Goodyear Tire and Rubber Co.	6,507	12,162	21,006	8,799	13,136	13,328
Goodyear Tire and Rubber Co. of Calif.	1,743	1,916	3,687	1,973	2,103	1,883
India Tire and Rubber Co.	174	304	471	179	55 [h]	248 [b]
Kelly-Springfield Tire Co.	1,166 [b]	1,526 [b]	1,453	3,440 [b]	358	2,491 [b]
Lee Rubber and Tire Corporation	72	234	300	1,025 [b]	784 [b]	166 [c]
Miller Rubber Co.	2,050	2,229	2,673	1,025	393 [b]	3,435 [b]
Mohawk Rubber Co.	...	344	581	610 [b]	631	688
Norwalk Tire and Rubber Co.	...	151	346 [i]	296 [b j]	47 [b j]	47 [b j]
Seiberling Rubber Co.	13	456	1,124	424	987 [h]	512 [c]
United States Rubber Co.	7,393	8,368	17,310	13,761 [k]	6,251 [k]	10,781 [b l]
Net total	29,243	46,730	84,179	34,670	53,017	1,229

[a] Compiled from *Poor's Manual*—Industrial Section. These figures represent net profits available for dividends or to carry to surplus, that is, after all expenses, depreciation, interest and provision for taxes have been deducted. [b] Deficit. [c] Years ending October 31. [d] Fourteen months ending December 31. [e] Before making provision for income tax. [f] After deducting $1,000,000 reserve for contingencies. [g] After reserve for contingencies, etc., $4,000,000. [h] Ten months ending October 31. [i] Nine months ending September 30. [j] Year ending September 30. [k] Includes $6,000,000 in 1926 and $4,000,000 in 1927 as earnings of U. S. Rubber Plantations, Inc. [l] Inventory adjustments amounted to $15,038,304.

Prices began to rise rapidly in 1924 and continued to rise through 1925. In these years profits were large—$46,730,000 in 1924, and $84,179,000 in 1925. While the price of their raw material was rising they appear to have been able to dispose of their products at prices rising at a much more rapid rate, thus passing on the burden, highly augmented, to final consumers. The slump in 1926 again reduced their profits to $34,670,000, less than half of what they had been the year before. On a falling market they were unable to pass on to final consumers the high prices paid for raw material. Profits recovered during the relatively stable price level of 1927 to $53,017,000, only to sink again to the lowest level shown in the table, $1,229,000, during the price slump of 1928. Individual companies differed in their experience, in proportion as they were able more or less skillfully to adjust the prices paid for their raw material to the price received for their finished products. But the general tendency was as stated.

The Stevenson Act lacked flexibility. Exports in excess of the permissible percentage of standard production were not prohibited, but were subject to a tax. However, the rates were worked out so as

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Miller visited the United States as delegates from the Rubber Growers' Association of London. In their report they said: "It cannot be too strongly emphasized that the rubber manufacturers passed through a crisis involving them in losses quite as severe as those sustained by producers." Quoted in *Hearings* before the Committee on Interstate and Foreign Commerce, House of Representatives, 69th Congress, 1st Session on H. Res. 59, p. 85.

to be virtually prohibitive.[28] A minimum duty was imposed on exports within the prescribed percentage, and exports in excess were subject to a sliding scale of duties higher than the minimum. This device gave an appearance of flexibility to the scheme which did not in fact exist. Consumers of rubber were repeatedly assured that the scheme would prevent the price of rubber from rising above 1*s.* 6*d.* per pound, or at least that it would prevent the price from rising much above that figure. They were assured that if the legal machinery proved deficient other means would be found for introducing the requisite flexibility to prevent the price of rubber from rising to exorbitant levels.[29] Little, however, was done. When prices rose sharply in 1925, the British government, in response to protests from consumers, released a few thousand tons of rubber which had been held in stock in Singapore, and eventually in December announced that on the first day of February, 1926, exports would be increased to 100 per cent of standard production instead of 95

[28] Exports, other than of couponed rubber, subject to the minimum duty, were practically nil except for nearly 7,500 tons in 1925 and 1926.

[29] See the telegrams reproduced in the *Hearings* before the Committee on Interstate and Foreign Commerce, House of Representatives, 69th Congress, 1st Sess., H. Res. 59, pp. 67-68. In July, 1925, the (British) India Rubber Manufacturers' Association, Ltd., issued a manifesto in which it charged the British government with a distinct breach of faith, referring particularly to Mr. Churchill's speech to the Incorporated Society of Planters on July 18, 1924, and to Lord Stevenson's reply to a deputation on October 9, 1922. See the *Times* (London), July 18, 1925.

per cent as provided in the original Act. These palliatives were relatively unimportant. They did not give true flexibility to the Act. This lack of true flexibility was one of the causes of the extreme fluctuation of prices.

To summarize: The evidence is clear that the Stevenson Restriction Act was an important factor in the recovery of rubber prices in 1922-1925. That prices would have tended to rise in any case is altogether probable in view of the rapid increase that was taking place in the world demand for rubber; but there is no reason whatever to suppose that prices would have mounted to anything like the exorbitant levels that were eventually attained had it not been for the restriction of output and the speculation that took place under the Act. While they lasted, high prices tended, of course, to enhance the profits of producers of rubber both within and outside the jurisdiction of the Act; and by the same token they imposed a great burden upon consumers.

In the end the refusal of the Dutch to come into the scheme and the rapid increase of production in outside areas led to the collapse of prices and the abandonment of restriction. How far consumers have subsequently been compensated for their earlier burden through the added stimulus to world productive capacity that was imparted by the Act—what would have been the course of prices in recent years had there been no resort to restriction—there is, of course, no means of telling. But in its immediate results there can be no doubt that the

Stevenson Act entailed heavy burden to consumers. And if the scheme as such was ultimately abandoned it is noteworthy nevertheless that the idea of restriction was not. On the contrary, negotiations for another agreement—this time to include the Dutch plantations—are now (February, 1930) actively under way.

CHAPTER VII

CANADIAN EMBARGOES ON PULPWOOD

Up to this point we have been offering illustrations of export restrictions designed either to obtain revenue for the governments imposing them or to aid domestic producers of the raw products to which the controls are applied. We come now to a third type; namely, restrictions for the purpose of promoting domestic manufactures. Conspicuous among illustrations of this policy, and of peculiar interest to the United States, are the restrictions that Canada and Newfoundland impose upon certain of their exports.

The Canadian restrictions have applied to several products. The most important one is pulpwood. But there have been others, such as the restrictions by certain provinces (notably British Columbia and Ontario) upon exports of timber besides pulpwood, the prohibition by Ontario of exports of iron ore, and—of peculiar interest—the tax by Ontario on the export of power to the United States.[1] During

[1] Ontario power companies are required, first of all, to obtain a special permit from the provincial government for the sale of power to American consumers. Such power as is sold across the boundary is then subject to a tax amounting at present to 3/100 of a cent per kilowatt hour. This tax is frankly designed to favor Canadian industries using such power and to prevent the rise of American industries based

the World War the Canadian government appears also to have applied the policy to nickel, of which Canada possesses virtually a monopoly.[2] Extension of the policy to asbestos, of which Canada produces some 85 per cent of the world supply, has also been widely discussed. In the present chapter, however, we shall in the main confine our attention to the restrictions on pulpwood.

The significance of the pulpwood case from the standpoint of the United States arises from its relation to the American pulp and paper industry. Pulpwood is the raw material from which the great

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upon it. It is argued that it is better to waste power for many years than to enable Americans to obtain a prescriptive right to its rental. The tax does not appear to be high enough, however, to be of any great advantage to Canadian consuming industries and is perhaps more significant for its possible future implications than for its present effects.

[2] In this case the Dominion government appears to have employed its monopoly of the raw material to force the International Nickel Company to abandon one of its plants in the United States and to establish a plant in Canada. In this connection the following quotation is significant: "In the case of nickel where we have also from 80 to 85 per cent of the world's supply, we sell about 70 per cent in the raw, and about 30 per cent as refined nickel, and we get for that 30 per cent something over $5,000,000, or as much as we get for the 70 per cent of raw. We would not be making that 30 per cent here but for the fact that the late government brought pressure on the International Nickel Company not only to erect a factory in Canada, but to manufacture within this country at least the requirements of the British Empire. It is not because of the operation of free trade that we manufacture a pound of nickel in Canada; it is because of real compulsion exercised by virtue of our power several years ago upon the International Nickel Company." Former Premier Meighen, House of Commons, *Debates*, Canada, Vol. LX, June 2, 1925, No. 79, p. 3958.

bulk of the world's paper is made. As the pulpwood resources of the United States—and particularly of the northeastern part of the United States, which has heretofore been the center of the industry—have become more and more depleted, the mills manufacturing pulp and paper have become increasingly dependent upon Canada for supplies. Since the United States produces and consumes over half the paper of the world, any curtailment of access to Canadian supplies is naturally a matter of special concern to her.

Especially is such curtailment significant in relation to the newsprint paper industry. Thanks to the politically powerful American newspaper publishing industry this product has for nearly two decades been on the American free list. With the American market freely accessible to Canadian newsprint there has been a natural tendency, as American supplies of pulpwood have become scarcer, for this branch of the paper industry to transfer its operations from the United States to Canada; and over half the American consumption of newsprint is now supplied by Canada.[3] Tending to expedite the transfer, however, and hence of vital concern to the American pulp and paper mills, have been the artificial obstacles to the survival of the American industry that have been imposed by the Canadian embargoes on pulpwood.

Canada and Newfoundland impose numerous

[3] Other branches of the paper industry have also developed in Canada, but the situation has peculiarly favored the manufacture of newsprint.

restrictions upon the export of pulpwood and some other woods. Since 1916 Newfoundland has required timber to be "manufactured into either paper or paper pulp, sawn timber or other salable products of timber" before exportation.[4] The restriction applies to all such products, whether from private or public lands. More varied, however, are the restrictions in the Dominion of Canada. In the main, those actually enforced are applied by the provincial governments rather than by the Dominion government. They are confined to Crown lands, but such lands include by far the greater part of the total pulpwood area of the Dominion. The only restriction as yet imposed by the Dominion government is a prohibition upon the export of pulpwood from its public lands in Manitoba, Saskatchewan, Alberta, and British Columbia. The government possesses statutory authority, however, to make the embargo policy much more sweeping; for in 1923 the Canadian Parliament authorized the executive to prohibit by Order in Council the exportation of all unmanufactured timber, from private as well as from public holdings. This grant of power has not yet been exercised and hence most of the restrictions actually in force are applied by the provinces.

The several restrictions applied by the provinces extend sometimes only to pulpwood, sometimes partially to pulp as well, and sometimes to other woods

[4] By an amendment of 1921, a certain amount of round timber, cut under special conditions within a period of four years, was permitted to be exported on payment of $1.00 per cord.

in addition to pulpwood. All the provinces which control Crown lands impose embargoes upon the exportation of pulpwood cut from Crown lands, and Ontario extends the prohibition to hardwoods. The general requirement in all the provinces except British Columbia and New Brunswick is that manufacture must take place within the Dominion, but not necessarily within the province itself. British Columbia prohibits the exportation not only of pulpwood but also of other logs and shingle bolts cut on Crown lands.

Other restrictions besides ordinary embargoes serve further to strengthen the Canadian policy. Thus British Columbia imposes a tax upon timber cut from certain Crown-granted private lands at a rate of $2.00 per thousand feet,[5] but this tax is remitted if the timber is manufactured or used within the province. While this tax is not strictly an export duty its effect, as levied, is quite the same as if it were. Ontario has extended the policy of restriction to pulp as well as pulpwood. In making license contracts with companies for the cutting of wood on Crown lands the Ministry of Lands and Forests has laid down the requirement that the wood must be manufactured into paper before exportation. Companies that had previously been manufacturing pulp for the American market must therefore manufacture it into paper themselves or else sell it to

[5] The rate is upon first grade timber; inferior grades are taxed $1.50 and $1.00 per thousand board feet. These rates were established in 1914. Legally the tax is reduced to one cent per thousand feet upon timbers manufactured in the province, but no attempt is made to collect this small sum.

Canadian paper mills.[6] Those who are most active in the campaign to restrict the exportation of wood admit that their final goal is an embargo on pulp as well as on wood, leaving only the finished product, paper, to be freely exported.

The Canadian restrictive policy has developed almost continuously since 1891. In that year British Columbia inaugurated a law prohibiting the export of unmanufactured timber cut from Crown lands. Ontario followed suit in 1900 in respect to pine logs, and in 1902 extended the restriction to pulpwood. In 1906 British Columbia began to tax unmanufactured timber cut on certain private lands and exported from the province. The Dominion government in 1908 applied the embargo policy to pulpwood cut upon its lands in the Prairie Provinces and British Columbia. In 1910 Quebec, and in 1911 New Brunswick, prohibited exportation of pulpwood cut from Crown lands. In 1923, as we have said, the Dominion Parliament gave authority to the executive for restricting exportation from private lands; though lands then under lease were promised exemption for ten years. In 1925 Ontario prohibited the exportation of hardwood logs from Crown lands. In 1926 Nova Scotia authorized a pulpwood embargo which went into effect May 1, 1927.

It is evident, therefore, that the policy of requiring wood to be manufactured before being exported has not yet been developed by Canada to its fullest extent. But it is equally manifest that each of the

[6] Williams, B. H., *Economic Foreign Policy of the United States*, p. 383.

last four decades has seen steps in that direction and that every advance has subsequently been maintained.

The restrictions in force in eastern Canada and the possibility of their further extension are of serious concern to the American paper industry. Something like one-fourth of all the pulpwood timber consumed by the American industry is imported from Canada. There are many paper mills, especially in the East, whose pulp plants would in all probability have to be closed were they denied access to Canadian timber. Cost of transportation of pulpwood limits the area from which a mill can profitably obtain supplies, and the supply in eastern United States is becoming increasingly inadequate to the needs of the eastern mills. Wood that is still available in the United States, but is far from the paper mills, cannot be transported great distances for the manufacture of a product like newsprint and, as such, be sold in competition with imported newsprint, which is on the free list. Wood that is used in better grades of paper, which are subject to tariff duties, is shipped as much as a thousand miles; but this cannot be done in the case of newsprint so long as the finished product must compete with the duty-free Canadian product.

Naturally, therefore, it has been a matter of serious concern to the eastern paper mills that by far the greater part of the Canadian supply of pulpwood is already inaccessible to them by reason of the embargoes now in effect, and that access to the remainder may be denied to them. The existing

restrictions upon the exportation of pulpwood are officially estimated to be applicable to 80.5 per cent of the spruce, balsam, and hemlock available in eastern Canada;[7] and as we have seen, it is proposed, and authority has been granted the Dominion government, to extend the restriction to wood cut on private lands. That such action, if immediate and sweeping, would be a severe blow to the American industry is obvious.[8]

The increasing dependence of the United States upon Canadian forests for pulpwood and the changing character of her imports of unmanufactured and manufactured pulpwood are brought out in the diagrams on pages 227 and 228, and in the table on page 230.[9] The diagram on page 227 shows how, as the pulpwood resources of the United States have become more depleted, an increasing proportion of her paper requirements has been met by imports of pulpwood or of pulp and paper. That there has been

[7] *Report of the Royal Commission on Pulpwood,* Ottawa, 1924, p. 94. The Commission estimates the available wood of "pulpwood species" at over 630 million cords, but gives a table only for spruce, balsam, and hemlock, totaling 436.2 millions, of which 261.1 millions are in eastern Canada. The Commission excludes Prince Edward Island, the Yukon and the Territories, as being inaccessible. It finds that 56 per cent of the area of Canada is forest, but that only 36 per cent of this forest is merchantable and accessible.

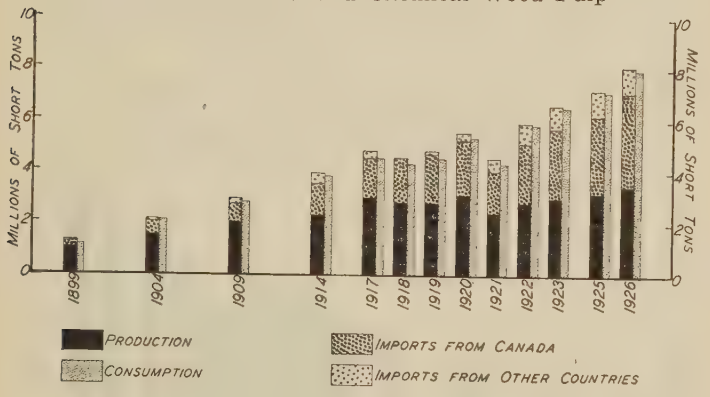
[8] In time, however, it is possible that the depletion of fee holdings will gradually tend to accomplish the same result in any case.

[9] For the original data on which the diagrams are based, and for further data showing Canadian production and exports of pulpwood, pulp, and paper, see Appendix C, pages 370-73.

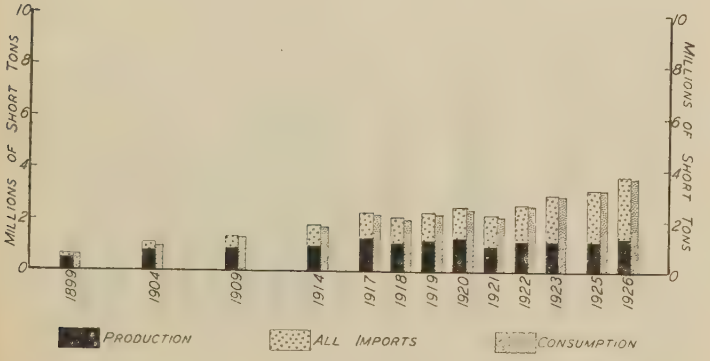
UNITED STATES CONSUMPTION OF WOOD PULP IN ALL FORMS, BY SOURCE OF SUPPLY, 1899-1926

(Pulpwood, pulp, and paper, all expressed in terms of pulp equivalent—in millions of short tons)

I. All Mechanical and Chemical Wood Pulp



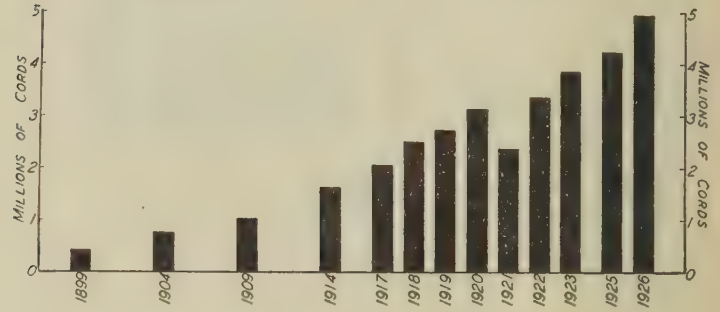
II. Mechanical Wood Pulp



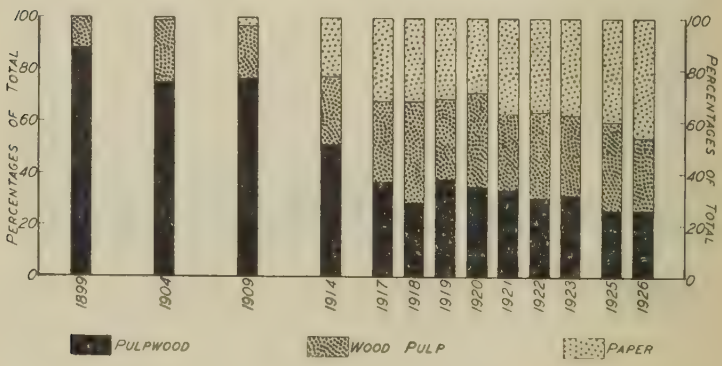
a great increase in her imports of paper and paper materials not only from Canada but from other countries is clearly disclosed in the first part of the diagram. Of newsprint pulp and paper, however, practically all of the imports come from Canada. From other countries the amounts are too small to be separately shown in the second part of the

AMERICAN IMPORTS OF PAPER AND PAPER MATERIALS FROM CANADA, 1899-1926

I. Total Imports, in Terms of Pulpwood



II. Relative Importance of Pulpwood, Pulp, and Paper in Total



diagram, which relates only to mechanical wood pulp—the raw material for newsprint.

The diagram on page 228 shows that as time has passed imports of pulp and paper have come to comprise a rapidly increasing share of all imports of paper and paper materials from Canada. At the beginning of the century imports of paper were negligible. Nearly 90 per cent of the imports came in as pulpwood. In absolute quantity, imports of Canadian pulpwood continued to increase up to the end of the World War, but at a much less rapid pace than imports of Canadian pulp and paper (see Appendix C, page 372). By that time pulp comprised about one-third, and paper about one-third, of all pulpwood, in whatever form, brought in from Canada. In more recent years imports of pulpwood have increased but little; imports of pulp have increased by something like half or two-thirds; while imports of paper have increased by about 150 per cent and now constitute, in pulpwood equivalent, nearly half of all imports.

Of newsprint paper alone, the table on page 230 shows that from half to two-thirds of the domestic requirement is met by imports from Canada. In recent years Canada's production of newsprint has actually exceeded that of the United States; in 1928 it was, indeed, almost double the American production; and by far the greater part of it is exported to the United States.[10]

That there has been a marked shifting of the manufacture to Canada is thus obvious. The questions

[10] See Appendix C, p. 373.

that now arise are: first, how far has this been due to the embargoes on pulpwood; and second, what

UNITED STATES CONSUMPTION, PRODUCTION, AND IMPORTS OF NEWSPRINT PAPER, 1899-1928 [a]
(In thousands of short tons)

Year	Consumption	Production	Imports	
			Total [b]	From Canada
1899.....	569	569	...	...
1904.....	883	912	...	...
1909.....	1,159	1,175	...	...
1914.....	1,576	1,321	315	310
1917.....	1,824	1,359	559	557
1918.....	1,760	1,260	596	595
1919.....	1,892	1,374	627	627
1920.....	2,196	1,511	729	679
1921.....	2,002	1,226	792	657
1922.....	2,451	1,447	1,029	896
1923.....	2,814	1,521	1,308	1,108
1924.....	2,821	1,481 [c]	1,357	1,201
1925.....	3,073	1,647	1,448	1,315
1926.....	3,517	1,686 [c]	1,850	1,750
1927.....	3,495	1,520 [d]	1,987	1,865
1928.....	3,561	1,415 [c]	2,517	2,041

[a] From U. S. Department of Agriculture, "American Forests and Forest Products," *Bulletin* No. 21, pp. 274, 275, 285. Figures in the original brought up to date.
[b] Virtually all of the imports other than from Canada are from Germany, Sweden, Norway, and Finland.
[c] Actual production reported by Newsprint Service Bureau.
[d] From preliminary report of U. S. Bureau of the Census.

are the future prospects if the present embargoes are maintained or extended?

As regards the situation up to the present it would appear that the Canadian restrictions have tended

to hasten, but have probably not been chiefly responsible for, the transfer of the manufacture to Canada. It is probable that the shift which has thus far occurred has been in the main the result, not of the embargo policy, but of fundamental economic factors that came freely into play with the placing of newsprint paper on the American free list in 1913. With the gradual depletion of American pulpwood resources the situation was already becoming increasingly favorable to the transfer of pulp and paper mills to Canada when the opening of the American market to Canadian newsprint in 1913 removed that obstacle to the development of Canadian manufacture. In the light of these facts and of the further fact that something like 20 per cent of the available resources of spruce, balsam, and hemlock in eastern Canada have remained in private hands and hence outside the scope of the embargo, it would be an exaggeration to attribute the rapid growth of the Canadian pulp and paper industry primarily to the pulpwood embargoes.

Nevertheless there is no doubt that these Canadian restrictions have already been a serious handicap to mills in the northeastern part of the United States engaged in the manufacture of newsprint paper. The necessity of obtaining their imports of pulpwood timber from the relatively restricted and inaccessible feehold areas has tended to create a stringency of supplies for their pulp mills. To continue in the manufacture of newsprint they have had to import an increasing proportion of their materials in the form of pulp, and this has involved

an increasing abandonment of their mechanical pulp mills. They have been able to escape some part of the burden by taking up increasingly the manufacture of other types of paper, but this has not to any great extent prevented the scrapping of their newsprint pulp mills. So far as concerns the manufacture of newsprint paper there is no reason to doubt that the Canadian restrictions have been a serious handicap to American mills and have tended to hasten the transfer of the industry to Canada.

More significant, however, are the future possibilities of the Canadian policy. The authority granted to the Dominion government to extend the embargo to private holdings and the obvious determination of both the Dominion and the provincial governments to tighten rather than relax the restrictive policy point to the prospect of much greater stringency of supplies for the American pulp mills in the future than at any time in the past. Even if there should be no further extension of the embargoes, the effectiveness of those now in force is likely to increase rapidly as the accessible feehold timber tends to become exhausted. It may be that technical progress, such for example as the recent successful manufacture of paper from cornstalks, will tend to lessen the dependence of the United States on Canadian supplies. But in any event, so far as the American newsprint pulp mills are concerned, the situation bids fair to become increasingly difficult if the present Canadian policy continues.

Restriction of the export of pulpwood is a protective, rather than a conservation, measure. Its

dominant purpose is to foster Canadian manufactures. It is true that the embargo policy is sometimes defended as a measure of conservation and that its further extension to include wood cut on private lands is advocated on this ground. It is clear, however, that the amount of wood consumed is not lessened simply by manufacturing it in Canada instead of the United States, as long as there is no accompanying restriction on the exportation of the finished product. And no one proposes to restrict exports of the finished product.

It has been urged that extension of the embargo to private lands would promote conservation, because mills erected near such resources could not afford to jeopardize their investment by wasteful exploitation of the timber and failure to replace it with new growth; whereas under existing conditions owners of the land are interested in the present alone and are likely to strip their land in a short time.[11] So long as other private owners are free to exploit their holdings there is, of course, no incentive for a particular owner to refrain from doing likewise. It is not clear, however, wherein this incentive would be reduced simply by prohibiting exports. Unless there were other legislation to prevent such an outcome, it would seem that owners should be just as anxious, if prices warranted, to strip their lands for

[11] See *Report of the Royal Commission on Pulpwood*, Ottawa, 1924, p. 257; also Shortt, Adam, "Canada's Policy Respecting Pulpwood," *Annals* of the American Academy of Political and Social Science, March, 1924, pp. 231-2.

sale to domestic as to foreign mills.[12] At all events, the conservation that might be accomplished through such an embargo does not loom very large in comparison with the annual exploitation of Canadian pulpwood resources, both private and public lands, that will continue in the absence of any restriction of exports of pulp and paper. So long as only the form, and not the amount, of Canadian exports is affected by Canada's restrictive policy, conservation can be regarded as neither the chief objective nor the chief result of her embargo policy. To say this is not, however, to deny the existence of a sincere interest on the part of responsible Canadians in preventing the wasteful exploitation of Canadian forests.

The dominant purpose of the embargoes, to repeat, is to promote domestic manufactures. Endowed with vast resources of pulpwood timber and accorded freedom of access, as regards newsprint, to the vast foreign market that lies just across the border, Canada has not hesitated to resort to restrictive measures designed to foster the manufacture of her pulpwood within her own boundaries. By restricting access by an American industry to an important raw material she has placed it at an increasing disadvantage in comparison with her own manufacture. Possessing a relatively small home market, she has not endeavored to stimulate her paper

[12] Temporarily, of course, the embargo might depress prices and compel the small owner to hold his wood; but only until new outlets were established on Canadian soil.

industry by resort to import duties on the finished product—the more usual form of protection. Rather, she has adopted the more aggressive policy of endeavoring to secure for her paper industry a monopoly of the manufacture for the vastly greater American market. However opinions may differ as to the justice of such a policy—a matter which we shall discuss more fully in a later chapter[13]—there can be no doubt that it imposes a large, and an increasingly heavy, burden upon an important American industry. In so doing it cannot but become an increasing source of international friction.

[13] See pp. 285-88.

CHAPTER VIII

COLONIAL DISCRIMINATORY EXPORT DUTIES

The restrictions imposed by Canada upon exports of pulpwood have been for the purpose of promoting manufactures within the immediate boundaries of Canada. Although they have affected the United States almost exclusively, they have not been literally discriminatory among foreign countries. Somewhat different, however, is the situation encountered in certain of the colonial possessions, both British and non-British, whose political status is distinctly more dependent than is that of the British self-governing dominions. This situation has involved the maintenance in such colonies of openly discriminatory export duties favoring the mother country.

Export duties have long been in common use throughout the colonial world. But such duties, though they frequently have protective tendencies, are generally imposed primarily for the purpose of raising revenue, and they usually afford but little stimulus to local manufactures. Sometimes, however, they are deliberately employed for the purpose of stimulating manufacturing or of aiding other interests in the home country, and it is with such use of them that we shall here be concerned.

Colonial export duties are sometimes made discriminatory in favor of the mother country in order to aid national shipping and trading interests. In these cases promotion of manufactures in the mother country by giving preferential access to colonial raw materials is only an incidental result and is not their chief purpose. In their operation the two types of duty are, indeed, quite different. When the aim is to aid national shipping the duty is remitted in whole or in part simply on the condition that the product be shipped to the mother country. But when the object is to aid manufacturing interests the duty is remitted, or partially remitted, only in the event that the product is to be further processed or manufactured in the mother country.

Duties of the former kind, even if the rate be high, do not necessarily change the ultimate destination of raw materials. They may merely cause the colonial products to reach their final destination via the mother country. They favor primarily the shipping or warehousing interests of the mother country, not the manufacturing interests. Even when the transportation between the colony and the mother country is not reserved to national ships, and it usually is not, the tendency is for national shipping to prevail in this trade. Any measure, therefore, which shifts the exports of the colony to the mother country tends to aid national shipping.

Yet even duties of this sort tend in some measure to aid domestic manufacturers. Having the supply of raw material brought to their doors is obviously an advantage. The greater the addition to

the foreigner's cost of raw material that results from compelling him to import indirectly via the mother country, the greater the opportunity for the manufacturer in the mother country to profit from such discrimination. This profit and that of the shipping and warehousing interests are at the expense of manufacturers in other countries, or more likely of the colonial producers, according to the competitive situation.

Portugal makes wide use of discriminatory colonial duties to favor her shipping, and the port of Lisbon has been built up largely as a warehouse and trans-shipment center for colonial products. France has countered the Portuguese policy by imposing extra duties upon products of non-European countries imported indirectly into France via foreign ports; yet she herself has practiced such discrimination. She has long imposed discriminatory colonial export duties on a few products, and she has increased the number since the War. The other colonial powers do not ordinarily enforce discriminatory export duties in their colonies, though such duties are found in Spanish Guinea and in Italian Libia and Somaliland. Since 1913 the United States has permitted no export duties of any sort in its dependencies except in the Virgin Islands.

That the employment of such duties in aid of national shipping is not more common is probably owing to the fact that their influence is usually not very great. Financial and shipping connections and other factors are likely to make the mother country the center for handling the products of her colonies

even without the imposition of discriminatory duties. Furthermore, the cost of making a colonial product detour through the mother country on its way to the final market is often very small; so that domestic manufacturers may gain but little advantage from such export duties. Export duties of this type are accordingly not of great significance in the present discussion.

But colonial discriminatory export duties are also employed for the purpose of promoting manufactures in the mother country. By making the remission of the duties dependent upon the processing of the raw material in the mother country, discrimination favors not merely national shipping but also domestic manufacturing. If there is an element of monopoly present, if the rest of the world is in any material degree dependent upon the raw materials subject to this kind of duty, and if the duty is sufficiently heavy, this type of discrimination tends to transform the monopoly of the raw material into a national monopoly of the finished product. Omitting the transportation factors, the discriminatory colonial export duty with the manufacturing proviso operates precisely as an export duty in the mother country would operate if imposed upon a raw material resource situated in that country. It is an attempt, through the manipulation of export duties, to give the domestic manufacturer preferential access to a raw material.

An instance of this latter type of discrimination is the remission of the Philippine export tax on manila from 1902 to 1913. The United States was

perhaps the first in the recent colonial period to apply an export duty with a manufacturing proviso to the product of a colonial monopoly. In the Philippine Tariff Act of March 8, 1902, the United States Congress created a discrimination by remitting

EXPORTS OF MANILA FROM THE PHILIPPINES [a]
(In metric tons)

Calendar Years	To All Countries (Annual average)	To United States		To Other Countries	
		Annual Average	*As a Percentage of Total*	Annual Average	*As a Percentage of Total*
1899–1901....	95,756	26,197	*27.4*	69,559	*72.6*
1902–1913....	136,187	66,664	*49.0*	69,523	*51.0*
1914–1928....	151,068	66,661	*44.1*	84,407	*55.9*

[a] Data from the *Annual Report* of the Insular Collector of Customs, Philippine Islands, 1928.

the Philippine export duty upon manila[1] when it was shipped "directly to the United States for use and consumption therein." The discrimination lasted until 1913, when the United States Tariff Act of October 3, 1913, abolished export duties in the Philippine Islands and the discriminatory feature accordingly lapsed.

[1] A product frequently called "manila hemp" but closer akin to sisal than to true hemp. This exemption of duty was accomplished by general legislation which virtually remitted the whole list of Philippine export duties upon shipments to the United States. In so far as products of the Philippines were upon the American "free list" the remission of the Philippine export duty was conditioned upon direct shipment to the United States for use therein.

The table on page 240 shows, by significant periods, the exports of manila from the Philippines to the United States and to other countries during the past thirty years.

These figures, based on the Philippine records, are to some extent misleading, however, in that they include among exports to other countries prior to 1902 very considerable quantities of manila that were later re-exported to the United States. The following table shows, by periods, the imports of manila into the United States directly from the Philippines and the imports via the United Kingdom since 1899:

IMPORTS OF MANILA INTO THE UNITED STATES [a]
(In long tons)

Years Ending June 30	From All Countries (Annual average)	From Philippines		From United Kingdom	
		Annual Average	*As a Percentage of Total*	Annual Average	*As a Percentage of Total*
1899–1902....	49,002	31,490	*64.3*	15,382	*31.4*
1903–1913....	65,983	64,199	*97.3*	1,682	*2.5*
1914–1928....	67,545	66,988	*99.2*	149	*0.2*

[a] *Commerce and Navigation of the United States.*

It will be observed from the first table that in the calendar years 1899-1901, inclusive, exports of manila to the United States constituted 27.4 per cent, and to other countries 72.6 per cent, of all exports. But if we make a rough correction to include in the American figures the exports to the United States via the United Kingdom (as shown

in the second table), the ratios become, instead, approximately 44 and 56 per cent, respectively.[2] In 1903-1913, the period of discrimination, almost exactly half the exports came to the United States. But with the removal of the discrimination, the percentage coming to the United States once more declined, averaging for the period 1914-1928, 44.1 per cent of the total. It is, of course, impossible to tell what influence may have been exerted by other factors; but the figures are clearly in line with the tendency that we should expect them to show. That is to say, the discrimination appears to have increased appreciably, though not greatly, the share of the manila consumed by the American cordage industry and to have reduced the share consumed by the cordage industry of other countries.

More striking, however, are the figures in the second table. These figures indicate clearly enough that the most striking result of the discrimination was to eliminate—or at least to hasten the disappearance of—indirect shipments to the United States. In 1899-1902, 31.4 per cent of all imports came in via the United Kingdom. In 1903-1913, only 2.5 per cent were so imported—most of these in the first few years after the discrimination went into effect. It is noteworthy, however, that the indirect trade did not revive with the removal

[2] The computation is not exact owing to the use of both fiscal and calendar years and to the slight difference between metric and long tons. But such error is small compared with the large differences that almost invariably exist between the export figures of one country and the "corresponding" import figures of another.

of the discrimination in 1913, for in the period 1914-1928 it amounted to only 0.2 per cent of the total. Apparently the new channels of trade had been too firmly established by that time to be affected by the repeal. However that may be, the shift from indirect to direct routing of exports to the United States immediately after 1901 was too rapid and too complete to leave room for doubt that the export discrimination distinctly expedited, even though it may not have been wholly responsible for, the subsequent elimination of the indirect trade.

We conclude, therefore, that the remission of the duty had the effect of bringing directly to the United States manila which had formerly been imported via Great Britain, but that it apparently did not have very great industrial consequences. It seems not to have interfered perceptibly with the cordage industries in Canada and Great Britain; though its failure to affect the industries in Canada was partly owing to the fact that Canada offset the effects of the discrimination by giving a bounty to domestic manufacturers.[3] Except where it was thus countervailed, its failure to have a strong adverse effect upon foreign industries was only because the rate of the duty was low, namely about 4 per cent ad valorem.[4]

[3] The bounty on binder twine was effective from September 1, 1902; that on cordage from January 1, 1907. Manila is used chiefly for cordage or rope making; sisal is more suitable for making binder twine and is usually cheaper.

[4] The rate was 75 cents a hundred kilos or 220.46 pounds. This equals one-third of a cent a pound upon a product the price of which averaged about eight cents a pound in 1902-1913.

The entire preference appears to have amounted to only about 10 per cent of the cost of conversion into the finished product.[5] Had the rate been exorbitant, the effect of the discrimination would necessarily have been to force all other countries either to allow the United States to manufacture manila rope for them or else to aid their own manufacturers by high countervailing duties or other measures which would burden their consumers.

Another instance of discrimination for the promotion of manufactures is the differential export duty on colonial tin ore maintained by Great Britain. Great Britain maintains two discriminatory export duties on tin ore—one of them in the Federated Malay States, the other in Nigeria. In 1903 the Federated Malay States, which were then producing about 60 per cent of the world's tin, imposed a prohibitive duty[6] upon all tin ore exported without guaranties that it would be smelted in the Straits Settlements. The Federated Malay States are protectorates and theoretically quite distinct from the colony of the Straits Settlements. Sir Frank Swettenham was, however, both High Commissioner of the Federated Malay States and Governor-General of the Straits Settlements, and it is clear that he initiated the discriminatory duty whose object was to safeguard the interests of the smelteries in the Straits Settlements. In 1904 the exemption

[5] "Cost of conversion" as shown by the value added in manufacture in 1909, according to the *U. S. Census of Manufactures.*

[6] The duty amounted at that time to about $11.50 per *pikul* (133 1/3 pounds).

from duty was extended to exports to the United Kingdom, and in 1916 to those to Australia; so that British and Australian home industries, as well as investors in the smelting industry of the Straits Settlements, came to be favored by the discrimination.

The adoption of the discriminatory duty appears to have been occasioned by the erection of a small tin smeltery in the United States, the chief consumer of tin. Owing to its inability to obtain supplies after the discriminatory duty became effective, this smeltery never operated. The export duty was a distinct handicap for the American smelteries erected during the War. They were compelled to use mainly Bolivian ore which, because of impurities, requires a more expensive refining process. By combining this ore with a considerable percentage of better ore they could have secured satisfactory results with a cheaper process. In spite of this handicap large quantities of Bolivian ore were smelted in the United States during, and for a time after, the War. Under peace time conditions, however, the difficulties were found to be too great, and since 1923 the American plants have been closed.

After the World War Great Britain also put into effect a differential export duty[7] on tin ore from the African colony, Nigeria. This colony produces less than 5 per cent of the world's tin. The duty, however,

[7] The statute defines the rate of duty as one-half of the maximum royalty. The maximum royalty was increased from 7 to 10 per cent, and the differential export duty is thus 5 per cent ad valorem.

reinforces the Malayan duty and tends to preserve to the British Empire a monopoly of tin smelting coextensive with the Empire's resources.

Few subjects require closer study than do customs duties. Rates that are superficially similar are frequently very different in their effects. Consider, for example, the contrast in the cases of manila and tin. Upon examination, the differential export duty of 5 per cent ad valorem on tin ore proves to be, not practically the same as the 4 per cent differential export duty on manila, but, in its practical effects and its necessary consequences, totally different. Tin concentrates were worth in 1923 [8] over $700 a ton and have averaged in recent years well over $400. Accordingly the 5 per cent duty may be reckoned as not less than $20 a ton. If $50 a ton may be taken as a fair price for smelting (and the price has been as low as $30 a ton in Great Britain), the duty of 5 per cent of the value of the raw material affords a protection equivalent to 40 per cent and upward of the cost of the processing operation. The duty is therefore prohibitive—unless smelteries elsewhere can underbid the British by some 40 per cent.

Two other discriminations were maintained by Great Britain for several years after the War. In 1919 India established an export duty of 15 per cent ad valorem upon untanned hides and skins, which

[8] The last year in which a substantial quantity was imported into the United States. In 1921, imported tin concentrates averaged $370 a short ton, their lowest figure since the War.

was designed to protect the tanning industry of India. The discriminatory feature of the duty was that two-thirds of the amount was remitted if the raw material was shipped to other parts of the British Empire and tanned therein. It was found, however, that India's monopoly of the lighter hides and skins was not as effective as had been supposed and that the domestic producers were not able to shift the burden of the duty to foreign consumers (chiefly Americans) to the degree that had been expected. The duty was therefore repealed in 1923.

In 1916 the British Parliament approved, and in 1919 there was put into effect, a discriminatory duty upon palm kernels exported from West Africa. The rate was two pounds sterling per ton, which was frankly intended to be prohibitive. The intent was to confine the crushing of palm kernels and the production of oil to Great Britain and to exclude Germany, which had been the chief crusher before the War.[9] The Act was found difficult to administer and was criticized because it limited the market for the native producers. It was repealed in 1922, two years before the expiration of the term originally set.

[9] See U. S. Tariff Commission, *Colonial Tariff Policies*, pp. 340-43.

CHAPTER IX

AMERICAN PRACTICES AS REGARDS DOMESTIC RAW MATERIALS

Thus far we have been describing, with a single exception,[1] practices that have been followed by foreign countries with respect to control of exports of raw materials. Before leaving the discussion of illustrative cases it is pertinent to examine the record of the United States in respect to control of exports of her own raw materials. Has the American government directly restricted exports? Has it actively encouraged measures that have tended indirectly to result in their restriction? Has it taken any steps pointing toward restriction in the future?

The United States has never adopted the policy of imposing restrictions on the export of raw materials. At the time of the adoption of the Constitution it was felt that duties on exports of raw materials would be a burden to domestic producers. So serious was felt to be their potential burden that the Constitution prohibited their imposition either by the states or by the Federal government.[2] Since this prohibition has never been repealed or amended,

[1] The Philippine export tax on manila hemp, discussed in the preceding chapter.

[2] Art. I, Sec. 9, and Art. I, Sec. 10.

neither the Federal government nor the state governments have ever had the power to levy such duties even had they thought such a policy wise. Nor during the past century has there been, in peace time, any other form of government restriction on exports. The Federal government has made no attempt, since 1809, to impose any embargo or other restriction upon exports except in war time. In short, except in the one instance of the Philippine export duty on manila hemp, which was repealed in 1913, the United States has never actively supported the policy of restriction of exports of raw materials, whether by export duties or otherwise.

There are, however, a few cases that bear some resemblance to the foreign controls herein described. None of them, it is true, involves government monopoly of a raw material.[3] And none has thus far involved any limitation of output or of trade that can be said to have been actively fostered by the government and to be comparable in degree with the foreign controls that have been discussed. But there are some that bear enough external resemblance to the foreign controls to warrant examination and comparison.

[3] The nearest analogy is the monopoly, begun during the War and maintained by the War Department, of all the helium produced in the United States. As the total amount has never been sufficient to fill even the dirigibles of the United States Army and Navy it is obvious that this rare gas has never constituted a raw material in the accepted commercial sense. The government's action is sequestration of a deficient war material rather than a commercial monopoly.

One instance involving some resemblance to foreign controls is afforded by American state taxes on certain minerals. Perhaps the most conspicuous have been the taxes by Pennsylvania upon anthracite coal and by Minnesota upon iron ore. These taxes, like the Chilean export duty on nitrates, are intended to provide a special revenue for the state from resources that are in some measure unique. Minnesota has the largest and most easily available supply of iron ore in North America, and Pennsylvania is the only state where anthracite is produced. But aside from the fact that they provide some revenue these taxes are in no respect comparable with the restrictive measures applied by other countries to certain raw materials. One of them, the Pennsylvania tax, is now only 1 per cent of the gross value at the mine and, after June 1, 1931, is to be entirely abolished. The other, the Minnesota tax, amounts to somewhat more than 6 per cent. Like the "severance taxes" which certain other states levy on mineral resources, these taxes are more nearly comparable with the revenue export duties of the newer countries [4] than, for instance, with the export duty of some 35 to 50 per cent which Chile maintains on nitrate.[5]

[4] See p. 18.

[5] Concerning the Minnesota tax, see Minnesota Tax Commission, *Ninth Biennial Report*, 1924, Chapters VI and VII. As regards severance taxes, see *ibid.*, p. 91. Minnesota imposes an occupation tax of 6 per cent of the value of the ore at the mine and in addition a tax of 6 per cent on royalties (which, of course, would be equivalent, where paid, to a much smaller percentage of the value of the ore). In Pennsylvania a law was passed in 1929 reducing the tax of

Nor is the difference in the height of the taxes the only distinction. Whether the consumer bears, or could be made to bear, so great a share of the burden of the tax in the case of iron and coal as in that of the much heavier levy on nitrate is uncertain.[6] But in so far as the consumer does bear the burden it is chiefly American, and not foreign, consumers who are affected by the taxes on iron ore and anthracite. Some burden might be felt by Canadians if the taxes were made high enough. Canadian plants at ports on the Great Lakes use Minnesota ore; and Canadian consumption of American anthracite, amounting to some 5 per cent of the total American output, is said to constitute something like 16 per cent of Canada's total fuel consumption.[7] But even so the case is far different from

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1½ per cent to 1 per cent for the period June 1, 1929, to June 1, 1930, to ½ of 1 per cent for the following year, and completely abolishing it after June 1, 1931.

[6] In all three instances there is a considerable measure of outside competition either from the product itself or from substitutes; though in the case of nitrate it remains to be seen how far this has been modified by the recent agreement with European producers of synthetic and by-product nitrogen. Minnesota dominates but does not completely control the iron supply of the United States. Pennsylvania, Alabama, and foreign countries contribute to the supply. Pennsylvania meets no competition from foreign anthracite, except in emergencies. But she encounters continuous competition from bituminous coal, fuel oil, and other fuels. On the elasticity of demand for anthracite, see Hollander, J. H., "Memorandum on Combination and Profits in the Anthracite Industry," *Report of the U. S. Coal Commission*, 1923, p. 997.

[7] As regards iron, however, it is to be noted that Canada has the choice of using her own ores, whose exportation she has prohibited; and as regards both iron and anthracite the

that of nitrate; for while Chile exports about 99 per cent of her nitrate, the United States consumes almost as overwhelming a proportion of the total American output of iron ore and anthracite.

A second instance involving resemblance to foreign controls arises in connection with federal aid to American agriculture. For many years, but with more vigor during the past decade, the Federal government has sought, through the Department of Agriculture, to aid farmers in adjusting production to market demand and thus to enable them to obtain more profitable prices for their crops. Within the past year it has created the Federal Farm Board, with much greater authority to extend such aid than has ever been possessed by the Department of Agriculture. Such activities at once suggest a degree of resemblance to certain foreign controls, such as coffee and rubber, that invites closer analysis.

As regards the past activities of the Federal government the evidence is clear that there has been no restriction of output in the sense in which it has been practiced in regard to coffee and rubber. The government has endeavored through educational measures [b] to encourage farmers so to regulate their

taxes actually imposed are as a matter of fact low. During strikes in the Pennsylvania anthracite fields a few years ago there were occasional proposals that exports should be prohibited. But the proposals were never seriously considered and Canada was allotted the same proportion of the limited output as she had received before the strikes occurred.

[b] Among other efforts in the farmers' behalf, the revamping of credit institutions and the fostering of co-operative associations of producers have been the most important. These,

production as to obtain better prices. The Department of Agriculture has furnished farmers with increasingly detailed information concerning current and prospective market demand and supply, both at home and abroad: statistics as to numbers of livestock, acreage of crops, stocks in storage, indices of purchasing power, consumers' preferences, and other data.[9] But this information, with such

however, have been directed toward the improving of market conditions rather than the control of production. As regards co-operative marketing, see p. 255, footnote 10. In the field of credit, the activities of the government have been animated by a desire to relieve the shortage of funds which might compel farmers to dump their products on the market at "distress" prices immediately after harvest or to sell livestock during a market glut or before it had been put in most desirable market condition. Both in the terms of laws governing the Intermediate Credit system and the Federal Reserve system and in their administration by the Federal Reserve and Federal Farm Loan Boards, it is the intention of the law to place every safeguard around these financial agencies to the end that they shall promote orderly marketing of farm products with a view to stabilizing farm prices rather than to withholding supplies from the market for the purpose of forcing prices above the level that would afford a reasonable return to the industry. Administratively, this purpose has thus far been carried out. For discussion of this matter see Benner, Claude L., *The Federal Intermediate Credit System* (Institute of Economics Series), 1926.

[9] For a time after the World War, the Department also undertook a somewhat aggressive advisory service designed to assist farmers in making the radical readjustments required after the highly abnormal conditions brought about by the War. But this experience soon revealed the pitfalls awaiting any agency attempting to give advice in regard to scale of productive operations in an industry so beset with seasonal hazards as is agriculture. It revealed also the unsatisfactory situation as to data upon which even suggestions as to market outlook could be based, and led to a redirection of the

interpretative comments as are required to show something of its significance, has been furnished to farmers simply as information, for whatever advantage they may wish to take of it. No pressure has been brought to bear upon them to accept it; and as a matter of fact it is exceedingly doubtful whether any case of major importance can be cited in which such advice has resulted in substantial addition to the price of any crop. Quite obviously there is a vast difference, as regards both method and result, between this sort of effort to aid producers and aid such as the limitation of acreage of Egyptian cotton, the prohibition upon planting coffee in Brazil, and the restriction that was for six years imposed upon the collection of rubber in Malaya.

Such has been the situation in the past. More recently, however, there have been developments that may eventually lead to restrictive practices in American agriculture bearing a much closer resemblance to foreign controls such as the Brazilian "coffee defense" than any that have heretofore prevailed. Dissatisfaction with the level of prices under the predominantly advisory policy of the government has been accompanied by increasingly persistent agitation on the part of American farmers for more positive action in their behalf. In the main this agitation has taken the form of demands for legislation designed to make the tariff on farm products more effective. This type of action has looked in the direction, however, of raising prices

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Department's effort toward expanding the scope and improving the accuracy of its statistical services.

in the domestic, rather than the foreign, market; indeed, has held forth the prospect of actually stimulating exports and lowering prices to foreigners. Both devices that have been proposed in this connection—the McNary-Haugen plan and the Export Debentures plan—have thus far been rejected by the government.

In the Agricultural Marketing Act of June, 1929, however, there is enunciated a new policy not essentially dissimilar in purpose, and in some respects similar in method, to Brazil's "permanent defense" of coffee. As to method it is too soon to say precisely what course will be followed by the Federal Farm Board set up under the Act. In large measure it will consist in financing, storage, and marketing operations aimed primarily at alleged speculative and other wastes in the present method of crop handling. But in addition thereto the Board is authorized to set up "stabilization corporations" [10]

[10] The stabilization corporations would be subsidiaries of co-operative organizations, and the Farm Board is specifically instructed to work through the co-operative movement. In fact the Board might in a sense be said to be a super-organization of co-operatives along lines that had been developing in earlier years. For many years farmers labored under peculiar legal disabilities in their voluntary efforts to organize in such manner as to secure the more effective merchandising of their product and organization of their industry. But during recent years practically all the states of the Union have passed enabling acts providing for co-operative organizations, and the courts have taken a liberal view toward such organizations under restraint of trade statutes and common law principles. In 1914 Congress recognized that co-operative associations under a strict definition laid down in the Clayton Act were not *per se* combinations in restraint of trade. In 1922 the Capper-Volstead Act broad-

whose action would be of the general foreign dumping character suggested in the McNary-Haugen and Export Debentures schemes. The method would be similar to the valorization provided as an emergency phase of Brazil's "permanent defense" of coffee. It would authorize a government agency to impound a considerable part of the marketable supply and endeavor to market it to the greatest price advantage, even carrying the seasonal surpluses of large-crop years into subsequent years. It would also be similar in the liberal use that it would make of government funds in the course of such holding operations.

Back of these activities, however, there remains the question of restriction of output. The Brazilian government has restricted both tree-planting and exports and has thus sought to enhance the possibility of stabilizing prices at more profitable levels than would otherwise prevail. Does the Farm Board propose to adopt measures of the same sort? That its policy may eventually include some measure of restriction is to be inferred from the fact

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ened this definition, but put the conduct of co-operative associations under the special regulatory authority of the Department of Agriculture so far as prices are concerned. In 1926 the Co-operative Marketing Act specifically authorized co-operative organizations to gather and disseminate production and market information freely among themselves after the manner of trade associations. And with the Agricultural Marketing Act of 1929 has come a definite policy of supporting and strengthening them by making them actual vehicles for the Farm Board's administration of the Act. For a discussion of the development of law in the field of co-operation see Nourse, E. G., *The Legal Status of Agricultural Co-operation* (Institute of Economics Series), 1927.

that one purpose in setting up the new agency is stated to be that of "aiding in preventing and controlling surpluses in any agricultural commodity through orderly production and distribution." In view of the very large number of producers of all the agricultural staples, the availability of land, and the ease of entering the business, the Board may find it very difficult as a practical matter to "control surpluses through orderly production"; but the law clearly authorizes it to do so.

Should the Board apply restrictive measures, however, it is almost certainly domestic rather than foreign consumers who will be chiefly burdened. It is the expressed purpose of the law, as of earlier proposals, "to maintain advantageous domestic markets." And in point of fact, it is hardly conceivable that for most of the American staples which we export a policy of restriction could be made to operate in any other way. Of every staple that we export we consume the greater part—of most, by far the greater part—of the total domestic output; and with the exception of cotton there is not one in the production of which the United States possesses even an approach to a world monopoly. The only instance, therefore, in which a restrictive policy might involve anything like as much burden to foreign as to domestic consumers is that of cotton. Of cotton the United States produces some 55 to 60 per cent of the world output.[11] It may be that the Farm Board will undertake to control the cotton "surplus"

[11] For the period 1923–24 to 1927–28 the United States produced 57 per cent of the estimated total.

through "more orderly production." If it does and if, as a result, industrial consumers in other countries (as in the United States) are obliged to pay substantially higher prices[12] for cotton than would otherwise presumably prevail, then the same observations that have already been made with reference to coffee will apply to cotton.

A third possible exception to our historic policy of non-restriction of exports grows out of the federal law permitting combinations for export trading. Earlier legislation had prohibited combinations in restraint of trade in the domestic market but had left uncertain the status of combinations for trade with foreign countries. The Act of 1918, commonly known as the Webb-Pomerene Act, removed that uncertainty by definitely legalizing such combinations for export trading. The Act was in large measure the outcome of careful investigations made by the Federal Trade Commission.[13]

The objects of the Act are: (1) to enable small manufacturers and producers to combine for export trade so as to maintain themselves in competition with large exporters already in the field; (2) to enable combinations of American manufacturers, producers, or exporters to compete with the trade

[12] Competition from other cotton-growing regions would, of course, tend to check the rise of world cotton prices, just as in the case of coffee and rubber.

[13] Federal Trade Commission, *Report on Co-operation in American Export Trade*, June 30, 1916. 2 Vols. See especially in Vol. I, "Summary," pp. 3–10; "Conclusions," pp. 370–381; and "Combinations of Foreign Buyers," pp. 354-369.

associations and cartels that exist in foreign countries; (3) to enable American producers by combining to confront the organized buyers of other countries, especially the combines for buying metals; (4) to clarify the situation and make it plain that combinations of Americans to carry on foreign trade are permissible under the laws of the United States as they are under the laws of foreign countries. The law grants equal freedom to combine for trade with all foreign countries.

Gauged simply by the percentage of our total exports handled by combinations under the Webb Law, the effect of the Act, while by no means negligible, has not been very great. Exports by such combinations constituted 4.3 per cent of all exports in 1926, 7.8 per cent in 1927, and 9.5 in 1928. Most of these exports were manufactured articles. But some were raw materials, and in connection with certain of these there have been subsequent developments that confer upon the Webb Law a significance in relation to the problem of control of trade in raw materials that is not at all measured by the magnitude of the exports. Particularly is this true of the combinations effected in respect to copper and sulphur.

In October, 1926, Copper Exporters, Inc., was formed under the Webb-Pomerene Act. To accord with the law, voting membership was confined to domestic copper producing corporations, all of which, with one comparatively unimportant exception, came into the new organization. But in addition, foreign

producers were invited to join as non-voting, associate members. In accordance with this arrangement Copper Exporters, Inc., became, in effect, an international cartel, with control of something like 90 per cent of the world copper production.[14] The cartel is a price cartel, without any direct limitation on output or division of markets, but with strict control over sales channels. The price control extends only to markets outside the United States, as no such control could be exercised in this country without a violation of the anti-trust law.[15] Its chief objects were asserted to be the elimination of speculation and stabilization of the price at a more remunerative level.[16] In particular it was aimed at a powerful buying group in the London Metals Exchange that had previously dominated the marketing of copper. It has resulted in the complete ascendancy of the producers and the elimination of

[14] Foreign producing interests joining the cartel included the Katanga mines in Belgian Kongo, the British Metals Corporation (including the Rio Tinto mines), and a number of subsidiaries and important sellers of copper. The British Metals Corporation (organized after the War with government participation to eliminate German influence in the British metal market) subsequently withdrew for a time but later rejoined.

[15] Domeratzky, Louis, U. S. Department of Commerce, "The International Cartel Movement," *Trade Information Bulletin* No. 556, 1928, p. 56.

[16] "The purpose of the new organization is to endeavor to eliminate in foreign countries the harmful speculation that causes wide fluctuations in the price, unwarranted by industrial factors in European markets, and tends to destroy confidence in the integrity of such prices and the stability of the business."—The *Mines Handbook*, 1926, p. 100.

the London copper market as a factor of international importance.[17]

Meanwhile prices of copper have behaved in a noteworthy fashion. Immediately after the registering of Copper Exporters, Inc., in October (1926) there was a sharp rise in prices, but it was only a short flurry. By the end of the month the price had fallen back again, and its failure to rise for another year seemed to deprive the first reaction of any real significance. In November, 1927, however, another increase set in. From 12.9 cents a pound in October the price of electrolytic copper in New York rose to 13.8 cents in December. Continuing upward through 1928 it had by the end of the year reached 15.8 cents. During the first three months of 1929 it continued to rise, attaining in March an average of 21.3 cents. Immediately thereafter, however, it fell to 18 cents, at which point it has since remained stabilized.

How prices of copper would have behaved since 1927 had there been no international cartel is something concerning which we can only conjecture. But it is freely alleged that the operations of the cartel have been an important factor in the rise. Whatever may be the merits of the case—and upon these we do not pretend to pass judgment—it is certainly true that this rise, taken in conjunction with the

[17] Prior to the World War the London market had been largely dominated by powerful German buying interests. As a result of the War control passed into the hands of British interests.

existence of the cartel and the introduction of more efficient methods of production, has resulted in a widespread feeling that a very liberal margin of profit is included in the prices that consumers, both foreign and domestic, are now compelled to pay for copper.

Similar in its main outlines, though not in detail, has been the story of sulphur under the Webb Law. In 1922 the domestic producers combined for export trade as Sulphur Exporters, Inc., and in November, 1923, entered into a three-year international agreement (since renewed) with Sicilian interests for allocation of joint output based, so it is stated, on the ratio of 75 and 25 per cent, respectively.[18] Since these two countries produce virtually all of the world supply of brimstone sulphur,[19] the agreement carries with it complete domination of supplies of sulphur in that form. In chemical combination with other elements, however—particularly in iron and copper pyrites—it is found in quantity in many countries and as a joint product of metal mining furnishes very considerable competition with brimstone

[18] This agreement related to both prices and territorial division of markets. Prices were increased by $1.00 a ton over those temporarily agreed upon in October, 1922. The North American market was reserved to American producers, the Italian to Sicilian, and others were divided "proportionately" between the two—with a further proviso fixing a maximum export total for crude sulphur and sulphuric acid in the case of Sicily, but at a point largely in excess of actual exports previously attained. See *Wall Street Journal*, March 28, 1923.

[19] Japan and Chile produce small quantities.

sulphur.[20] The possibility of even greater competition from this source, moreover, is forecast by the recent development of a cost-lowering process, involving the use of a catalyst derived from vanadium, that is better adapted for the manufacture of sulphuric acid from pyrites than from brimstone. But the practical difficulties of shifting from one type of production to the other are such that there still remains a considerable margin within which the international agreement in respect to brimstone sulphur can operate without severe check from pyritic sulphur. Within these limits the supply situation is still dominated by Sulphur Exporters, Inc.; and it is perhaps not unreasonable to assume that the rise of contract prices by as much as four dollars a ton—an increase of some 30 per cent—

[20] Sir Auckland Geddes, Chairman of the Rio Tinto Company which operates the famous Spanish mine of that name and which operates in 21 countries besides Spain, said on April 4, 1928:

"You know, of course, that though we are always classed as a copper company, by far the greatest bulk of our produce is sulphur and iron ore, and now we are adding zinc and lead, which improvements in metallurgy enable us to recover. Sulphur is, however, the vehicle which carries all pyrites into consumption, and year by year sulphur is becoming more important to civilization, and we, year by year, are supplying more and more of it to the great chemical companies of the world. We have on our books today hundreds of contracts centered on this business of the supply of sulphur.

"There are, however, vast potential supplies of sulphur in various forms scattered widely over the world, all, or practically all, of which can be made available for consumption. This makes it unreasonable to expect any great advance in the price of sulphur in any future that we need trouble ourselves with today."—The *Times* (London), April 5, 1928.

since the formation of the agreement is at least in part attributable to the agreement.

Another instance of an agreement under the Webb-Pomerene Act affecting a raw material is that of petroleum. In May, 1929, the Export Petroleum Association, Inc., filed papers with the Federal Trade Commission for exporting petroleum and petroleum products. Little detailed information is available concerning the operations of the powerful interests (both domestic and foreign) represented in the agreement, but the purpose is said to be elimination of competition in the export market and maintenance of the export price. Thus far operations are reported to be confined to gasoline and kerosene; and as yet there appears to have been no allocation of the international market as a phase of the agreement.

The question that now arises is this: how far, if at all, do these agreements under the Webb-Pomerene Law constitute a parallel to the foreign controls of raw materials that have been discussed in previous chapters? In their practical outcome there is undoubtedly a measure of resemblance. Whatever may have been its purpose, it is clear that the Webb Law has facilitated the formation of international cartels, under American domination, which are definitely in a position to exact higher prices from both foreign and domestic consumers than might otherwise prevail.[21]

[21] In referring here to domestic consumers, we do not at all ignore the fact that the Webb-Pomerene Act explicitly forbids agreements in restraint of trade in the domestic market

There still remains, however, an important distinction in the matter of degree of government participation. In respect to the combinations authorized under the Webb Law, all that the government does is to remove the legal obstacles to combination—for export trading. It does not participate in, nor in any way undertake to foster, measures designed to aid in controlling output and price. It confers, moreover, no privilege that has not long been exercised in foreign countries. It permits the copper and the sulphur producers to organize for export trading. And it has apparently taken no active steps to prevent them, thus organized, from entering into international agreements with foreign producers in circumstances that may, indeed, make it difficult for the United States consistently to protest against certain types of national and international cartels. Yet there is clearly a distinction between that sort of policy and an active policy of fostering monopolistic restrictions upon the export of raw materials.

On the whole, therefore, it is fair to conclude that the American government has not thus far actively supported a policy of restriction of exports of raw materials. It prohibits export duties, and it has

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in violation of the anti-trust law. How an international agreement to "stabilize" the foreign price of such a thing as copper can be maintained without affecting the domestic price is, however, not clear. If it cannot—if domestic prices *are* increased—then the Webb Law must, in effect, tend to defeat the operation of the anti-trust law. And if it can—if domestic prices are *not* increased—then the law must tend to encourage price discrimination against foreigners.

never sanctioned, except in war time or in extreme emergency, any embargo or other restriction upon exports. It has countenanced in some instances, and has not actively opposed in others, measures that are perhaps indirectly restrictive in tendency. And in respect to agriculture there are indications that it may soon apply more definitely restrictive measures designed to limit output—though not for the purpose nor with the prospect of discriminating against foreign consumers. Nevertheless it is a fact that the whole tenor and emphasis of American policy in the past has been opposed, rather than favorable, to the policy of restricting foreign access to domestic raw materials. If this is because of self-interest rather than of any superior self-restraint on the part of the United States—if the competitive character of most of her exports and the vastness and richness of the home market have lessened the temptation to foster restrictions aimed at foreign consumers—it is none the less a fact that such restriction has not been encouraged.

CHAPTER X

EQUITABLE TREATMENT OF FOREIGNERS

We have described in preceding chapters the objects, methods, and results of control of exports of certain raw products by foreign governments, and we have examined the attitude of the government of the United States toward control of exports of its own raw products. It is our task in the remaining chapters to examine the issues that arise from this discussion of facts and to consider what may be done toward advancing their solution.

The paramount issue in this whole matter of export controls turns upon the determination of what is to be regarded as fair, and what unfair, in their exercise. How far may a country[1] properly go in exploiting its monopolistic or quasi-monopolistic position in respect to a particular raw material? Is there any line to be drawn between the complete acceptance of such controls as a legitimate exercise of national sovereignty and their total elimination on the ground that they are an unwarranted interference with the free movement of products indispensable to the life and economic well-being of consuming countries?

It is our primary purpose in the present chapter to

[1] Or a group of countries, where there is an international cartel.

indicate, in the light of the cases already discussed, the nature of the issues and of the difficulties involved in any attempt to determine what is fair and what is unfair. But before taking up this phase of the subject it is pertinent to inquire whether the results of the controls that have been discussed warrant any presumption that consuming countries have been unduly exploited. How successful has been the policy of control from the standpoint of producing countries, and how burdensome to consuming countries? What have been the chief limiting factors in the operation of these controls? Has control been successful enough to justify the widespread apprehension that it has aroused?

I. ECONOMIC EFFECTS OF CONTROL

In order to answer the foregoing questions it will suffice simply to present a summary of the results of the controls described in earlier chapters. The data are necessarily incomplete and they are frequently somewhat inconclusive. Nevertheless they suffice to throw much light on the subject.

The cases examined herein disclose that the policy of control has met with a very considerable measure of success. They reveal that the burden, though it has varied with individual cases and with the period of control under consideration, and has perhaps been smaller than public opinion in the consuming countries has assumed, has none the less been great enough to present a serious problem.

In the case of the Chilean nitrate monopoly, restrictive activities on the part of the government

for a long time yielded large revenues to the state and large profits to the mine owners. An investigation by the Chilean government revealed that from 1920 to 1927 profits—even after payment to the state of large revenues that must have been borne in part by the producers—averaged, for one important group, over 50 per cent; for another, from 25 to 50 per cent; and for the rest, from 10 to 25 per cent. More recently, it is true, competition from synthetic and other manufactured nitrogen has become an important factor in the situation. For a period of eighteen months—from February, 1927, to August, 1928—the Chilean monopoly, as we have seen, actually broke down and competition prevailed among the producing companies. Since that time, however, a new agreement, more flexible in many respects than the old one, has been put into effect; and still more recently, a tripartite agreement has been concluded with the German and British manufacturers of synthetic and by-product nitrogen which will presumably tend to strengthen the economic position of all groups.

In the case of the Japanese camphor monopoly, available statistical evidence indicates a substantial and sustained rise in prices after the formation of the monopoly over the level of prices which had previously prevailed, and large profits to the Japanese government. Here too, however, the growth of competition from the producers of synthetic camphor has become an increasingly important factor, with the result that the price of Japanese camphor was

reduced by 25 per cent in May, 1926, and again by 15 per cent in July, 1927.

Evidence in the potash case leaves no doubt whatever that foreign consumers have been heavily burdened in the past by the government-fostered monopoly of this product. For years prior to the War, and for a time after the War, the inefficient organization of the German potash industry—inefficiency that had been fostered by the monopolistic prices and the excessive mining capacity that developed under the quota system of production—imposed a heavy burden upon consumers, without any compensating gain to producers. Yet so complete was the natural monopoly and so closely was it organized under the fostering hand of the government that the overhead cost of excessive mining capacity was easily reimbursed, and a wide margin of profit maintained, in the prices charged for potash. With the break-up of the natural monopoly after the War by reason of the return of Alsace to France, this earlier state of affairs could no longer continue. Reorganization of the German industry in 1924, under authority conferred by earlier legislation, prepared the way for a reduction of costs that has since gradually brought the industry to a high level of productive efficiency. But in the same year an agreement with the French interests terminated the threat of price competition from that source. As a result, prices have not reflected the decline that has occurred in costs—have not, indeed, been reduced at all—and hence earnings of the industry have in recent years been very high.

The various methods of governmental restriction

employed by Brazil in respect to coffee—"valorization," "permanent defense," and the restrictive measures associated with them—appear to have maintained prices at a higher level than would have prevailed without government intervention, but to have moderated extreme fluctuations in them. Particularly effective, at least for several years, appear to have been the control measures in force since 1924. By establishing warehouses among the plantations for storing coffee, by affording more adequate credit to planters on stored coffee, by limiting maximum shipments from the interior to the port of Santos, and in other ways, the government (of Sao Paulo) succeeded in maintaining prices very considerably above the level that presumably would have existed in an uncontrolled market.[2]

In contrast to coffee, control of rubber, far from stabilizing prices, exaggerated the fluctuations in them. For a time it resulted in great burden to consumers. The enormous increase in prices in 1924-1926 is chiefly traceable to the restrictions imposed under the Stevenson Act and the speculation which they fostered. Increasing demand was also a factor, but in no such measure as to account for anything like the amount of the increase that took place in prices. As was pointed out earlier, companies whose dividends in 1923 and 1924 had ranged from 6 to 12 per cent on nominal investment earned from 17 to 55 per cent in 1925 and 1926. If we multiply the increase in prices in 1924-1926 over 1921-22 by the amount consumed in the United States,

[2] For very recent developments, however, see Chap. V, p. 160.

it appears that the cost of the increase to industrial and ultimate consumers must have been something like $550,000,000. For this, restriction was to a large extent responsible. To some extent, however, the burden has presumably been, or will presumably be, offset by the stimulus to world productive capacity that resulted from the period of high prices. That is to say, prices of rubber are probably lower now, and if there is no resumption of control, will probably be lower during the next decade, than they would have been had the Stevenson Plan never been adopted. Consumers in the aggregate—though not necessarily the same individuals—are presumably being partially compensated for the earlier burden.

With respect to other controls discussed in preceding chapters—pulpwood and certain colonial products subjected to discriminatory export duties, notably tin—whatever burden they have imposed thus far has probably fallen chiefly upon industrial rather than ultimate consumers. The amount of the burden can scarcely be estimated, but there is no doubt that both the pulpwood and the tin restrictions have hampered American industries. In the case of tin they were directly responsible for the stifling of a domestic smelting industry.

Competition from external sources and from substitutes has mitigated, but has not eliminated, the effects of control. Monopolistic control of raw materials usually tends to develop competition either through the opening up of other, perhaps less advantageous, sources of supply, or through the development of substitutes. This has been true, in

greater or less degree, of all the important monopolies that have been organized. Even in potash, which comes nearest to being an exception, competition is tending to increase. The appearance of these competitive factors has placed new problems before the countries enjoying a monopolistic position and has brought into play much ingenuity in meeting them. It has resulted in new adaptations of method rather than in abandonment of restrictive policies.

The Chilean nitrate industry, for example, which supplied before the World War well over half of the total world output of nitrogen products, now supplies scarcely a quarter. Manufactured nitrogen has made tremendous inroads. But this loss of ground by the Chilean industry has resulted in improvement of control technique rather than in the abolition of control. Indeed, with the consummation of the recent agreement between the Chilean, German, and British interests, whatever protection to consumers was inherent in this earlier competition has been minimized. In the case of the Japanese camphor monopoly, also, the power to exploit consumers has been seriously compromised by the advent of the synthetic product. Here no combination of the two competing groups has taken place, and consumers have undoubtedly profited by the existence of competition. Nevertheless the Japanese industry is by no means at the end of its resources so far as its influence on prices is concerned.

The Brazilian coffee "valorization" has had the effect of stimulating coffee production in other parts of the world. Particularly important has been the

increasing competition from the coffee plantations of Colombia. Yet this situation has stimulated, rather than discouraged, control measures. Likewise the rubber restrictions have led to an increase of production in other parts of the globe. The British share of the total world production of rubber has declined from approximately two-thirds prior to the adoption of the Stevenson Plan to slightly over one-half. The power of the British interests to control prices has been so curtailed that for the time being restrictions have been abandoned. But the possibilities of price-raising which were demonstrated when restriction was at its height remain as a reminder of what can be done; and in recent months there have been active negotiations between British and Dutch interests concerning the formation of a joint selling pool designed to improve the price situation.

In short, as experience with control accumulates and as the technique of restriction becomes more and more ingenious, it is only too clear that growth of competition has tended to encourage a widening of the scope of control measures by carrying them beyond national frontiers and making their forms more flexible. When national control has broken down or has been seriously compromised, control through international agreement has been the next step. In nitrate and potash the step has been taken; in rubber, sugar, and a number of other products it has been, or is now being, seriously contemplated; and in coffee and camphor the situation has become increasingly favorable to it. Whereas formerly the

cleavage of interest as between producers and consumers ran very largely along national lines, it now tends increasingly to transcend national boundaries. Control has become international rather than national in scope. Competition has mitigated the effects of control, but it has neither eliminated them nor compelled abandonment of the policy. Quite the opposite: it has merely led to redoubled efforts to make the policy effective.

II. EFFECTS ON INTERNATIONAL RELATIONS

So much as regards the economic burden. It is not alone from the economic side, however, that the effects of control are to be viewed. Even more important in the long run, perhaps, are the results from the standpoint of international relations, the ill will that they engender.

Export controls have been an increasingly important source of international friction. All barriers to trade are, of course, in the nature of irritants to peaceful international relations, because all are frankly nationalistic in design. In this study, however, we are considering only one of the many types of trade restriction that have led to international friction in the past. How far other types—import duties, for example—may be better or worse from the standpoint of equity and the preservation of international good-will, is a challenging, but an extraneous, point.

The growth of export controls has led to an increasingly widespread conviction among consuming countries that inequitable treatment exists and

hence to a sense of grievance against the producing countries that constitutes an increasing threat to peaceful commercial and political relations. This sense of grievance grows in proportion as popular belief imputes to monopolistic control even greater powers of exploitation than it actually possesses. Always, moreover, there is the fear that any appreciable measure of success with a particular control may encourage its continuance and tend to foster extension of the practice to other industries. Experience shows that whenever monopolistic control breaks down, the government of the country concerned, though it may endeavor to change the form of control, seldom abandons the idea and usually succeeds, sooner or later, in re-establishing some kind of restriction.[3] Add to this situation the popular exaggeration of the effectiveness of control measures and it is not difficult to understand why they have been an increasing source of friction.

In the main resentment has expressed itself in ways other than through formal diplomatic protest. Diplomatic action has usually not been invoked for the reason that the controls have not usually involved any actual violation of international law or of treaty relations between producing and consuming countries. Evidence of friction has nevertheless appeared in various forms: in public discussion in the press and elsewhere, in official inquiries and reports, in prosecutions launched

[3] See Chap. I, p. 13, and Appendix A, pp. 347-64.

under the local law of the aggrieved country, and in open or thinly veiled threats of retaliation on the part of government authorities.

In the United States public resentment is perhaps best reflected in the pressure that has been brought to bear on the Federal government to obtain relief. The measures undertaken in response to this pressure have included special congressional inquiries, such as the pre-war inquiry of the Pujo Committee into the control of coffee and the post-war hearings by the House Committee on Interstate and Foreign Commerce on crude rubber, coffee, and other controls.[4] They have included suits against American sales or other agents of the foreign industry on the ground of violation of anti-trust laws, as illustrated by the pre-war suit against Sielcken and other American agents of the Coffee Valorization Committee and also by the recent suits brought against American agents of the sisal, quinine, and potash combines. They have included discouragement, through the State Department, of loans to foreign monopolies, as is illustrated by the refusal within the past few years of large loans to the coffee and the potash industries. And they have even included direct diplomatic pressure.

A notable instance of diplomatic pressure arose in connection with the pre-war potash controversy with Germany, to which reference has already been

[4] U. S. House of Representatives, Committee on Interstate and Foreign Commerce, *Hearings on Crude Rubber, Coffee*, etc., 1926.

made.[5] In this case legislation by the German government tending to nullify the effect of contracts with American interests was the subject of most vigorous protest by the State Department and there were intimations of tariff reprisals by the United States.[6] There have apparently been other instances of such pressure, as for example in combating the rubber control; but their precise nature has not been made public.[7]

Of the efficacy of the foregoing measures in behalf of consumers more will be said in the next chapter. The mere enumeration of them at this point suffices

[5] See footnote 17, p. 98.

[6] On January 8, 1910, while the German legislative action was still pending, a telegraphic instruction was sent to the Ambassador at Berlin which read in part as follows: "Repudiation by German potash interests is contrary to the sense of business integrity, and the Department cannot conceive that governmental sanction of such action as represented by potash interests will be given, since to do so might be construed as evincing an unfriendly intent and operating to perpetrate international injustice."—Williams, B. H., *Economic Foreign Policy of the United States*, pp. 388-89.

On May 5, 1910, six days before the passage of the disputed German law, the American Ambassador was given further instructions as follows: ". . . the American government cannot but regard the enactment of such a bill as indicating such an unfriendly if not indeed hostile attitude toward this branch of American commerce and industry as may give rise to grave apprehensions."—*Ibid.*

[7] On this point, see Williams, *Economic Foreign Policy*, p. 402. According to W. O. Rutherford, Vice-President of the B. F. Goodrich Company, who was in close touch with Ambassador Houghton in London, "We made our presentation and our Ambassador in Great Britain, Mr. Houghton, carried on the work. I am here to say that he has done and is doing a very splendid piece of work."—*Ibid.*, p. 398.

to disclose the anxiety and the friction that have been aroused in the United States.[8]

In other consuming countries there has been similar concern, not merely in regard to government monopolies of raw materials but in respect to the whole problem of distribution of raw materials. Most prominent among such countries has been Italy, whose conspicuous lack of raw materials has made free access to foreign supplies a matter of peculiarly vital concern. But among all of them there has been increasing solicitude. Of the manner in which this anxiety has been reflected in recent international discussion more will be said in a later chapter.[9]

We have shown that control has resulted in economic burden to consuming countries great

[8] In an address at Erie, Pa., on October 31, 1925, Secretary Hoover expressed the following opinion regarding the international aspects of the policy of control: "But the moment that a government, directly or indirectly, fosters or establishes these combinations, then that government has taken the responsibility for the prices. Whether these prices be reasonable or high, the populations of the consuming countries direct their attention upon the selling government and the matter becomes one of national emotion among all consumers. These peoples at once appeal to their government for action that it should use its great powers for their protection. Every day for the past year our government departments have had to deal with exactly this thing. And at once we have higgling of merchants, lifted to the plane of international relations, with all of its spawn of criticism and hate.... The world will never go to war over the price of anything. But these actions can set up great malignant currents of international ill will."—*Ibid.*

[9] See Chap. XII, pp. 319-32.

enough to arouse serious concern and to establish a widespread conviction that inequality exists. Whether in every case the burden has in fact been great enough to warrant this conviction is not so important as is the fact that the conviction prevails. It is only too clear that consuming countries do feel, whether rightly or wrongly, that unfair advantage is being taken of them by other countries; that a proper sense of justice and fair play would never countenance in producing countries the policy of ". . . deliberately erecting official controls of trade in raw materials of which their nationals produce a major portion of the world's supply, and through these controls arbitrarily fixing prices. . . ." [10] So long as this feeling persists, proper concern for the maintenance of international good-will plainly requires that an effort be made to reach a common understanding as to what is fair and to secure adherence to this understanding.

III. WHEN DOES CONTROL BECOME INEQUITABLE?

Where, then, is the line to be drawn in determining what is fair and what is unfair? Abolition of all government restrictions on trade in raw materials would, of course, be the ideal solution from the standpoint of consuming countries. But it is idle to suppose that producing countries would willingly

[10] From a statement by Secretary Hoover, in U. S. Department of Commerce, "Foreign Combinations to Control Prices of Raw Materials," *Trade Information Bulletin* No. 385, 1926, p. 1.

accede to so drastic a limitation upon their national sovereignty and it may even be questioned whether they should ever be expected to do so. And yet refusal on their part to agree to any limitation whatever of the right to practice such restriction, no matter how aggressive and predatory the restriction may be, is certain to be followed by growing resentment and the possibility of drastic retaliatory measures on the part of other countries. So long as public opinion in the consuming countries holds to the belief that foreign consumers are being subjected to inequitable treatment it will readily countenance such measures of redress.

It is not a part of our task to undertake to show precisely where the line is to be drawn. Just what constitutes inequitable treatment is, of course, not easy to determine. Opinions as to what is fair or unfair may well differ even when there is complete agreement on the essential facts. All that we shall undertake to do at this point, therefore, is to suggest certain general principles or considerations that may form the basis for further discussion, and to indicate some of the difficulties involved in any attempt to give them specific application. In a later chapter we shall make further suggestions regarding the manner in which these, or other principles may be elaborated and applied.[11]

Take, first, the case of export duties levied for revenue purposes. Manifestly, these may be so high as to enable a nation to throw the burden of a disproportionate share of its public expenditures

[11] See Chap. XII, pp. 332-43

upon the foreign purchasers of its raw materials. This does not, of course, mean that the foreign purchasers of a country's raw materials should contribute nothing to the support of that country's government. It does not even mean that they should not contribute substantially to the maintenance of that government. But it does mean that a presumption of inequitable treatment inevitably arises when a country attempts to arrange its tax system in such a way that its own citizens escape a reasonable share of the burden of its public expenditures at the expense of the foreign purchasers of its raw materials.

Yet how is one to determine when a country is throwing an undue burden of its public expenditures on foreigners? There is, unfortunately, no simple test. For example, is the foreigner contributing over-much if one-third of the country's revenue is raised from an export duty on a monopoly product? Is he bearing an undue share of the burden if he feels the export tax as much as natives feel the domestic taxes? And how measure his burden as compared with theirs? Who can tell whether an export duty of $10 a ton on Chilean nitrate would weigh more heavily on American cotton planters than a land tax of 50 cents an acre or a cattle tax of 10 cents a head would weigh on Chilean citizens?

A careful examination of the country's entire revenue system, including the possible sources of revenue and the use made of them, may sometimes answer the question without difficulty. When, for example, high duties are levied on the export of

goods subject to monopoly while other exports are left subject to low duties, inequitable treatment of foreigners seems apparent. And it is again apparent when such duties are levied by a state which possesses but fails to draw upon the usual sources of internal revenue.

Unfortunately, however, the facts do not always speak so clearly, are not even wholly ascertainable. It is no easy matter, for example, to determine how much of the export duty is actually borne by foreigners. Our discussion of the incidence of the duty in the case of the Chilean nitrate monopoly indicates the possibility that perhaps not more than half the duty levied by the government actually falls on the foreign purchasers; that the remainder comes out of the pockets of the producers; and hence that the prices paid by foreign purchasers of nitrate products would probably not be reduced by anything like the total amount of the duty if the duty were abolished.[12] Even where the facts are reasonably clear, there may be border-line cases in which there is room for honest difference of opinion as to their significance from the standpoint of equity. It is all too true, as American courts have held in discussing constitutional provisions that taxes must be levied equally,[13] that exact equality and the precise application of justice are not practicable in matters

[12] Provided the producers continued to maintain monopoly control.

[13] "Perfect uniformity and perfect equality of taxation, in all the aspects in which the human mind can view it, is a baseless dream, as this court has said more than once." —U. S. Supreme Court in *Patton* v. *Brady*, 184 U. S. 608, 622.

of taxation. But it is also true that increased observance of the principle of equity has remedied many abuses once common in internal taxation, and that greater observance of it in the domain of international taxation would be no less a contribution to international order than its observance internally has been to domestic order.

As illustrating further the problem involved in determining what is fair in the matter of control, take the case of restrictive practices intended to maintain or enhance the profits of producers of raw materials, such as the coffee, potash, and rubber restrictions. Such restrictions may well permit the producers of the controlled materials to secure a rate of profit in excess of that generally current in the country. And since such a rate of profit is apt to result in large measure from the high prices charged foreign consumers, there is a strong presumption of inequitable treatment. But here, too, there is no simple test for determining precisely what is a "fair price."

The chief source of difficulty is in the definition of terms. It might be possible to agree on some such general definition as this: a "fair price" is one which is the same for domestic and foreign purchasers and one that enables producers operating under normal conditions and with reasonable efficiency to secure profits as great as are generally current in industries that are not aided by the advantage of monopoly. Such a price could, of course, never be precisely ascertained. Yet it might be ascertained with sufficient accuracy to determine when an

existing price diverges widely from it. This is tacitly admitted, even if not openly avowed, in all price-controlling measures of governments. Such a price is the base, for example, used by governments in regulating the charges of those legal monopolies commonly known as public utilities or public service companies. Monopolies of raw materials, when actively fostered by governments, might be looked upon virtually as public utilities. In regulating them, precisely as in regulating public utilities, many difficulties would, of course, arise.[14] And yet public utility commissions operate more or less effectively in spite of such difficulties.

Finally, take the case of export restrictions in aid of domestic manufacturing. Such restrictions tend to bring about a relocation of industrial enterprises

[14] When, for example, are restrictive activities on the part of the government of the producing country dictated by the real needs of the situation and when by a desire to secure for the producers of controlled raw materials an exceptional advantage at the expense of the foreigners? The fact is that both these factors may be involved, but in varying relationship once control has set in. If, as is usually the case, the control is introduced in a period of low prices, the price first fixed may indeed be so little above the prevailing price as to be quite fair to consumers. Once the control is seen to be effective, however, prices are likely to be raised with but little heed to any principle of fairness. When the British rubber restriction was first applied, it was feared that the innovation might prove unpopular at home as well as abroad. The British government accordingly supported the plan with the argument that the basic price was not high in comparison with the cost of production. But after finding that the scheme could be made to yield immense profits, the government raised the basic price by some 40 per cent with but little regard to the fairness of the new basis.

based on the controlled raw materials. If they are made sufficiently drastic, they may result in a concentration of these particular enterprises wholly within the country or countries producing the particular raw materials. Foreign consumers of the articles manufactured from these raw materials must then take them in finished form; and the producers of such articles in the consuming countries, denied access to the raw materials which they must have for continued operation of their plants, must see their investments wiped out. So complete and sudden denial of access to a raw material to a foreign industry that has become largely dependent upon it is, of course, extreme and unlikely to occur. But restrictions less sudden and drastic may result in a burden differing only in degree and not in kind from that just indicated. At what point does such burden become inequitable treatment? More difficult even than in the case of the other two types of export restriction is the setting up of any test by which this can be decided.

In the case of Canadian restrictions on the export of pulpwood, for example, we have a comparatively new country, its industries dominantly extractive, exceedingly anxious to foster its manufactures by whatever artificial means may be at its disposal. By means of import duties it can preserve the home market, but no more than the home market for its own industries; and it is not a large market. But by means of restrictions on the export of pulpwood and pulp it can hasten the development of a paper industry large enough to supply not merely

the home market, but also a large part of the American market. It can thus compel the United States to obtain her supply in the form of the finished product rather than the raw material and by so doing can foster the investment of foreign capital in Canadian manufactures. But at the same time, its restrictive export measures do tend to dislocate industry in the United States based on imported pulpwood and pulp and hence to create resentment and ill will. And if the embargo should be extended to include privately-owned lands as well as Crown lands, the resentment would certainly increase.

The chief objection to all such restrictions in aid of domestic manufacturing consists in the danger that they may be so sudden and drastic as to play havoc with vast industries that have been established and maintained on the supposition that access to foreign raw materials will not be ruthlessly cut off. In a world where huge industries have come to depend upon free access to foreign raw materials, drastic restriction, or denial of access to the materials, is certain to result in confusion to industry, in huge losses to investors, and perhaps in dangerous international friction.

But in a world that countenances other types of trade restriction in aid of domestic manufacturing does it follow that no restrictions of this character should ever be tolerated? Is it necessarily a final condemnation of such restrictions that they tend to conflict with the system of protectionism that is now predominant; that is, with a world system of diversified national economies erected for the most

part behind the shelter of protective import tariffs? And if it is not a final condemnation, where is the line to be drawn? How rigorous must be the application of export restrictions in aid of domestic manufacturing in order to constitute inequitable treatment? These are difficult questions, and it may well be that no line can ever be drawn that will cover every possible case that may arise. But in no wise does that make it less important that nations shall endeavor to arrive at a common understanding as to what is fair and reasonable in respect to such restrictions and shall endeavor to see that the principles agreed to are faithfully carried into practice.

Enough has been said to show that opinions may differ as to the precise point at which, in a given case, equity ceases and inequity begins; that serious difficulties are bound to arise, if not in securing agreement in principle as to what is fair or unfair, certainly in giving concrete application to any general limitations that may be adopted. Yet these difficulties will not prevent consuming countries from endeavoring in some manner to obtain what they regard as equitable treatment. In seeking relief there are two main lines of action open to them. Acting wholly upon the principle of national sovereignty, an aggrieved country may endeavor, by means of diplomatic pressure and by the use or the threatened use of coercive measures, to force upon the offending country its own particular conception

of what is fair and reasonable. Or, acting upon the assumption that the problem is essentially international in character and that any genuine and lasting advance toward its solution must come through international rather than national action, such a country may direct its main effort toward the creation of permanent international machinery for dealing with the problem. In the next chapter we shall consider the first of these alternatives—that is, purely national action—as exemplified in the measures that have been, or that might be, undertaken by the United States.

CHAPTER XI

RELIEF THROUGH NATIONAL ACTION: THE UNITED STATES

In combating foreign controls the tendency has been to let matters drift until an emergency arose and then to resort to purely national measures as a means of relief. Aggrieved nations have been content for the most part to rely upon their own resources in meeting particular emergencies. Pressed by their citizens for immediate relief the governments of such countries have sought by means of national measures to obtain what they regard as more equitable treatment. A few countries, it is true—most prominent among them Italy—have also made persistent efforts to secure international action in respect to the whole problem of distribution of raw materials. But in the main the onus of securing relaxation of the objectionable restrictions has been assumed by the particular country most affected by them.

Of no country has this tendency to rely on purely national action been more characteristic than of the United States. For this and for other reasons her attitude is of special interest. The United States is the greatest consumer of most, if not all, of the controlled products. As measured by total burden, therefore, she has more at stake in securing

relaxation than has any other country. And as one of the powerful nations, with almost unequaled natural resources upon which to rely in case of trade war, she is commonly assumed to be in a better position than any other to effect her purpose. Whatever she might accomplish, acting alone, toward securing relief, can therefore be taken to represent perhaps the most that can be achieved by any single country.

It is accordingly the purpose of this chapter to examine the past experience of the United States in combating controls and the possibilities of further independent action on her part in combating them. Are there any means by which the United States, acting through the instrumentality of national policy, can induce or compel the observance of what she regards as fair practices in the exercise of government controls over exports of raw products? What has she thus far accomplished in this regard, and what more can she do?

I. PAST AMERICAN DEFENSES AGAINST CONTROL

We turn first to an account of past efforts made by the American government to obtain relief for its citizens. In the main these efforts have been of a purely defensive sort. There has been little in the way of aggressive retaliatory action against this particular type of trade restriction, though the possibility of retaliation and of trade war has usually lurked in the background.

The United States has followed no systematic legislative policy in regard to foreign restrictions on

exports of raw materials. Successive tariff acts have provided penalties for countries that restricted imports from the United States, but foreign export restrictions have been largely ignored. As a rule the tariff bargaining policy of the United States has made no *general* provision for penalizing countries that resort to them.

The only instance of a penalizing provision of a general nature was that contained in the Tariff Act of 1909,[1] and even that was directed only against *discriminatory* export restrictions; that is, restrictions discriminating against the United States as compared with other foreign countries. Section 2 of the Act of 1909 prescribed a duty of 25 per cent ad valorem, in addition to the normal duties levied in Section 1 of the Act, to be imposed on all imports from any country which "unduly discriminates" against products of the United States. It then provided that the same penalty should be applied to any foreign country imposing a duty or prohibition on *exports* "which unduly discriminates against the United States or the products thereof." This provision was never used to secure relaxation of any export restriction. Since it was directed only at "undue discriminations" against the United States, its terms did not cover restrictions such as those upon potash, nitrates, coffee, and camphor, which were applied equally to exports to other foreign countries. In any event the very severity of the

[1] The Tariff Act of 1922 contains in Section 317 (3) a provision which might possibly in some circumstances be effective against a *discriminatory* export duty or restriction.

penalty would have made it quite unfit for this purpose. Too many domestic interests would have suffered if duties imposed in the Tariff Act of 1909 had been raised as the law required by an additional 25 per cent ad valorem on *all* imports from a country maintaining some discriminatory restriction on the export of a single product.

Against a few *specified* restrictions the tariff acts for a quarter of a century have carried penalties. But the penalties have always been in the form of additional import duties on the commodities made of the raw material subjected to control[2] and they have always been futile. Typical of measures of this sort are provisions in Schedule 13 of the Tariff Act of 1922. The import duties on certain varieties of paper are there named with the provision that if the country from which the paper comes imposes any duty or other charge upon exportation of the materials out of which the paper is made an additional import duty shall be collected when the paper enters the United States.

At times legislative action on the part of the

[2] An apparent exception appears in paragraph 401 of the Tariff Act of 1922, which, to penalize and offset British Columbian export duties on logs, imposes an import duty, not on lumber and shingles, which remain free, but upon the same raw material which has been subjected to the export duties. But in this case the provision was worded so as to penalize merely temporary withdrawals of the export restrictions by the government of British Columbia which would have resulted in dumping of logs over the border and the demoralization of the domestic logging industry without any permanent benefit to American industrial consumers.

American government, designed to curb foreign controls, has taken forms other than the tariff. On several occasions Congress has undertaken to investigate some particularly obnoxious foreign restrictions. Usually, however, the only practical results have been a few appropriations of money to promote production in the United States of materials controlled by other countries. Nearly $500,000 of such an appropriation was employed a few years ago in surveying the feasibility of growing rubber in the Philippines and elsewhere. In 1926 Congress authorized the expenditure by the Geological Survey and the Bureau of Mines of $100,000 annually for a period of five years for the study of potash deposits in the southwestern states. Great sums have been spent to develop water power at Muscle Shoals, and although the undertaking began as a war measure, hope of a domestic supply of synthetic nitrates in time of peace has been among the motives for its continuance.

Defensive activities of the executive branch of the American government have been spasmodic and usually fruitless. From time to time the Department of Justice, in response to outbursts of public discontent, has instituted legal proceedings against the agents of foreign monopolies. Reference has been made elsewhere to the suit that was brought in 1912 against Herman Sielcken because of his activities in connection with Brazilian coffee valorization.[3] A few years later the sisal monopoly was

[3] See p. 143.

prosecuted.[4] Still more recently, in April, 1927, suit was brought by the Department of Justice in the District Court of New York against the Franco-German potash interests for activities alleged to be in violation of our anti-trust laws; and in February, 1929, a consent decree was entered enjoining them from further pursuance of such activities within the United States.[5] In 1928 legal proceedings insti-

[4] In this case, a suit brought against the Sisal Sales Corporation, an agent of the foreign (Yucatan) combination of producers, was dropped following certain changes in the practice of the Corporation. In some quarters it has been contended that this suit, by disrupting organized control and stabilization of prices and hence creating greater uncertainty in the manufacture of binder twine, resulted in actual burden rather than benefit to American farmers.

[5] This decree may perhaps be taken as a typical instance of this line of procedure. The decree brought to a close litigation begun by the filing of a petition against members of the Franco-German potash cartel and their representatives who were in the United States for the purpose of establishing a single exclusive selling agent in this country. In May, 1927, the French defendants moved to dismiss the petition on the ground that the suit was in fact one against the French Republic, the owner of the French potash deposits in Alsace. In July the French Ambassador addressed a letter to the Secretary of State in further support of this position. Counsel for the Ambassador maintained that charging a foreign government with unlawful conduct and hailing its instrumentalities into court were an affront to a friendly nation and were likely to impair good relations. A decision adverse to the French defendants was entered on January 8, 1929.

The decree enjoins the Franco-German interests from carrying out, within the United States, various activities, described in the decree, enabling them jointly to control prices and distribution; but it significantly adds that "no provision of this decree shall be construed to prevent defendants from selling and delivering any or all part of their potash salts outside of the United States to a corpora-

tuted against American representatives of the Dutch quinine monopoly led to a somewhat similar consent decree restricting their activities within the United States. But since the acts which give offense in respect to these foreign controls are usually committed outside the jurisdiction of the United States, as a rule with the concurrence of the foreign governments, such efforts of the Department of Justice have generally been foredoomed to failure.

Another expedient of the Federal government has been the discouragement of loans to foreign raw material monopolies. The government has declared that such loans will not be acquiesced in by the State Department. Although there is no legal obligation on the part of financial interests to secure such consent, the attitude of the government sufficed to prevent the issuance in 1925 of a loan of $30,000,000 to the State of Sao Paulo for the coffee control and of $25,000,000 to the German potash industry; and

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tion organized under the laws of any country other than the United States, regardless of any stock ownership or other interest in said corporation by any or all of the parties hereto; or to prevent said corporation from selling and distributing in the United States such potash salts so acquired, through usual facilities for sale and distribution. . . ." This provision is obviously intended to cover the operations of the *N. V. Potash Export My*, which, though incorporated as a Dutch concern, is virtually the selling agent of the combine. In spite of other provisions in the decree apparently intended to prevent the combine from controlling the operations of a third corporation, such as that enjoining the combine from fixing resale prices, etc., there is obviously no effective way of detecting and preventing acts committed outside of the United States which may accomplish virtually the same end as if they were committed within the jurisdiction of our anti-trust laws.

it is said to have prevented British rubber interests from obtaining American credit. This policy, while it may have been something of a handicap to such foreign monopolies, has not, however, served to break them up. Both the potash and the coffee loans were subsequently floated in Great Britain.[6]

Other activities of the Federal government have centered around attempts to achieve independence of foreign supplies or to stimulate foreign competition with the producers of the controlled material. Of certain special appropriations for this purpose mention has already been made. In times of stress officials of the Department of Commerce, in public addresses and in the press, have explained the usefulness of conservation and the need for economy in consumption as a means of escaping the exactions of foreign monopolies. Efforts of this sort may have had some effect a few years ago on the cost of sisal, and they appear to have had considerable influence on the domestic demand for rubber in 1925-26.

Efforts have likewise been directed toward increasing domestic, or new foreign, sources of supply of the materials themselves or of substitutes for them. The Department of Agriculture has sought by research and experiment to develop from domestic resources camphor, rubber, sisal, and other materials that have to be imported, or else substitutes for these materials. The Department of Commerce has sur-

[6] See Williams, B. H., *Economic Foreign Policy of the United States*, p. 97, and Donaldson, John, *International Economic Relations*, p. 492.

veyed the possibilities of growing rubber in new areas and has encouraged the acquisition by American interests of holdings in Liberia, Brazil, the Philippines, and elsewhere. Through the Bureau of Standards the Department has sought to develop synthetic rubber, and it has been successful in improving methods of using reclaimed rubber and also in greatly increasing the durability of automobile tires. Through the Bureau of Mines, and in co-operation with the Department of the Interior, it has sought to increase the domestic production of potash. And it is said to have "facilitated the interest of Americans in planting coffee in Colombia and Haiti and Central America." [7] It is, indeed, upon such defensive activities designed to build up competitive sources of supply either at home or in new foreign areas, that the Federal government has thus far chiefly relied.[8]

[7] Secretary Hoover, in *Hearings* on Crude Rubber, Coffee, etc., p. 298.

[8] On this point the following comment by Mr. Hoover, while Secretary of Commerce, is worth noting: ". . . It is my belief that we should confine ourselves simply to a consideration of what temporary measures of relief we can find and what final and complete protection we can ultimately give our citizens through assuring our raw materials at reasonable prices from competitive sources. We should thereby at the same time be giving equal protection to all consuming nations. By conservation and economy in use we can reduce the volume we import if prices become unreasonable. We can better organize our purchases and our distribution among our consumers, and, fortunately, the natural resources of the world, the inventions of science, and the wealth of our country are such that we could with proper organization build up competitive sources of supply in most cases. In those commodities which from the nature of our

It would be an exaggeration to say that these defensive activities of the Federal government have been entirely futile. Some of them have undoubtedly served to mitigate the effects of control in times of emergency. Others have achieved, or may ultimately achieve, results of lasting benefit to consumers. But in no case can it be said that a foreign control has been abandoned wholly or chiefly on account of them. Even as regards the rubber control it is clear that abandonment of the scheme was due more largely to the competition stimulated in outside areas by high prices than to the defensive activities of the United States. Dependence upon foreign supplies has persisted in spite of every effort to promote independence. Unfavorable conditions of soil and climate, lack of suitable deposits, and other basic causes have operated to prevent domestic production on any considerable scale of almost every raw material that has been subjected to control.

The futility of any real hope of achieving national self-sufficiency in respect to the controlled products has, indeed, been recognized in our tariff policy, and in the main such products have been kept on the free

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climate we can not ourselves produce we must seek to stimulate production elsewhere. In certain commodities we can find solution through synthetic chemistry. In the meantime we should be able to devise additional methods which will give some earlier relief. These, it would seem, are the policies which we as a nation should follow. They open up fields of action free from trade reprisals, and, in fact, contemplate solely defensive measures. No one can rightly complain of such activities." U. S. Department of Commerce, *Foreign Combinations to Control Prices of Raw Materials*, p. 4.

list. Even when duties have been imposed they have usually been futile. In the case of mercury, for example, progressive increases in the rates of duty have only stimulated the depletion of the limited American resources and by so doing have increased rather than diminished our dependence upon the Spanish-Italian combine.

II. POSSIBLE ALTERNATIVES OF NATIONAL POLICY

Up to the present time the American attitude toward foreign export controls has clearly been one of passive toleration, occasionally interrupted by more or less futile defensive activities when a particular control has become too burdensome. We come now to the question as to what conceivable lines of national policy might be adopted for the future and what would be the probable consequences of their adoption. There appear to be two main alternatives. The first is a policy of non-resistance. The second is a policy of aggressive resistance through retaliation.

A. Non-Resistance

The United States might assume definitely a position of "splendid isolation" by attempting no aggressive interference with the commercial practices of other countries and by permitting none with her own. Such a policy would not exclude efforts, through economic self-help, to make the United States less dependent on foreign supplies. But it would definitely exclude coercive measures.

And more: it would call for abandonment of public opposition and protests that have accomplished much in the way of provoking retorts and animosity abroad and very little in the way of preventing the increased application of controls.

A consistent policy of non-resistance has some apparent advantages. It possesses the advantage of seeming to avoid international friction; and only the most chauvinistic nationalist would deny that this in itself raises a presumption against agitation of the issue except where failure to act may result in really serious burden. But how serious is the burden?

It can hardly be contended that the cost to American consumers of recent and existing restrictions has been impossibly difficult for them to bear. It is true that the burden has been large and will presumably increase if the tendency to widen the scope of control measures continues. But for a country with wealth and resources so great as those of the United States the onus is surely not unbearable. Moreover, it may prove to be only temporary. Progress in the development of new sources of supply or of satisfactory substitutes is always a possibility that may ultimately minimize, if it does not vitiate, the effects of a particular control. And if such progress does not suffice, there is the further possibility that other consuming countries, on whom the burden may fall more heavily in relation to their capacity to bear it, will be forced to take the initiative in combating the controls while the United States passively stands by, ready to reap the benefits.

A plausible case for a policy of non-resistance can be made on these grounds.

Eventually, however, a negative policy would result in burden that domestic interests would not tolerate. By committing herself to such a policy the United States would simply invite perpetuation of existing restrictions and extension of control to other products. In so far as the restrictions were applied to raw products, such as nitrate, potash, and coffee, that are not subject to any considerable manufacture, it is the ultimate consumer who would suffer. But many—probably an increasing proportion—of the raw products that are liable to export control are manufacturers' raw materials. And in so far as the restrictions were extended to them the burden would weigh most heavily upon the particular field of enterprise that American commercial policy has in the past endeavored to protect and stimulate. To the protests of ultimate consumers of non-industrial raw products would then be added the protests of industrial consumers of the raw materials of manufacture.

In the foregoing circumstances it is highly probable that the government would eventually be compelled to abandon its policy of inaction. Possibly, if the foreign restrictions were not too severe, it could ignore for an indefinite period the inarticulate and scattered protests of a few ultimate consumers of raw products. But it is doubtful whether the concerted and vigorous protests of powerful industrial interests whose supplies of essential raw materials were curtailed could be successfully

resisted. It was industrial, rather than ultimate, consumers of rubber in the United States who took the lead in opposing the Stevenson Restriction Act. It is industrial, rather than ultimate, consumers of Canadian pulpwood in the United States who have been most exercised over the Canadian export restrictions on that product.[9] With the increasing stringency of supplies of raw materials as the scope of control measures widened would almost certainly come a rising volume of protest from industrial consumers that the government would find it increasingly difficult to ignore. Non-resistance would eventually give way to a more active policy, without even any compensation for the burden suffered meanwhile. Would it not therefore be wiser for the United States to adopt a policy of immediate and aggressive national resistance?

B. Retaliation

It should be said at once that the use of force to secure supplies of materials from other countries would not be tolerated by American opinion. The

[9] True, the opposition of American interests has not been successful in securing the removal of the Canadian restrictions, and hence the erection of newsprint pulp and paper mills on the Canadian side of the boundary has been hastened. But this has happened in spite, and not in default, of opposition on the part of the American industry and the American government. Thus, for example, paragraph 1301 of the Tariff Act of 1922 provides for an additional duty on paper other than newsprint coming from countries or provinces that maintain export restrictions on pulpwood. Owing, however, to the powerful opposition of the newspaper publishers, there is no political possibility of countervailing the Canadian restrictions by imposing a duty upon newsprint paper.

only punitive method available, therefore, is retaliation. This would meet with little disapproval at home on grounds of propriety and justice, provided it were used against discriminatory and damaging commercial practices. There are, however, three great objections to it. The first is, that it is a combative method, provocative of international ill will, and therefore to be avoided if a more conciliatory method can be found. This objection is too self evident to require discussion. The second is the difficulty of applying it with effect. The third is the danger of counter-reprisals. The two latter call for explanation.

Retaliation cannot be enforced without injury to domestic interests. The wealth of the United States and the great variety of her resources have given rise to a belief that she is little dependent on others for prosperity and that any sort of restriction she might apply to foreign trade would hurt foreign interests without greatly affecting her own. Imposing penalties for unfair treatment, therefore, is commonly thought to entail small costs. But when it comes to selecting the particular form that the penalty shall take it is found that the economic independence of this country is much less complete than had been supposed.

An amendment to the Constitution authorizing the imposition of export duties would allow the United States to retaliate in kind against foreign controls of raw materials. Eventually the provocation may be great enough to enable such an amendment to be carried; but its effectiveness, even if it were available

now, is easily exaggerated. With all her enormous resources, cotton presents the nearest approach to a monopoly possessed by the United States.[10] As already shown, she produces some 55 to 60 per cent of the world output.[11] The United States supplies to Great Britain, France, Germany, Canada, and Japan high percentages of their total cotton requirements.

[10] The United States might possibly return to the exploitation of the Philippine monopoly of manila fiber. The United States supplies material percentages of the world's copper, mineral oils, sulphur, lard, tobacco, wheat, and other articles. But for various reasons none of these is well adapted for export restrictions: the United States does not supply sufficiently great percentages of the world's total, or there are alternative sources, or the percentage supplied by the United States is decreasing, or there are too many substitutes available. The United States has been supplying some 20 or 25 per cent of the wheat and flour moving in international commerce. But for determining the amount of pressure which export duties would exert upon foreign countries one must reckon on the percentage of the total consumption outside of the United States supplied by exports from the United States and also upon the possible stimulus to production in foreign countries. Wheat now consumed in the producing countries would enter international commerce if the price in the importing countries were made more inviting, and production in both surplus and deficit countries would be likely to increase. Exports of wheat and flour from the United States constitute about 5 per cent of the total world consumption outside of the United States.

[11] Taking the five-year period, 1924-1928, inclusive, as representative, the United States exports some 58 or 59 per cent of the cotton which she produces. She therefore supplies some 42 to 47 per cent of the cotton consumed by the rest of the world. But since India, China, and Brazil also consume much of the cotton which they produce, Europe is very largely dependent upon the United States. Within considerable limits Egyptian cotton is too expensive and Indian cotton too low in quality to replace the American product.

Undoubtedly, therefore, an export duty on cotton would burden those countries. Even a small duty would seriously affect Great Britain, since her cotton manufacturers depend upon export markets for over 80 per cent of their trade. Only in the home market could Great Britain effectively countervail a small export duty on the raw material by a slightly higher duty on the finished product. Without pushing the duty to a point at which the manufacture of cotton goods for the domestic markets of the countries named would be seriously impaired, the United States could take away from those countries a large part of their export trade in cotton yarns and textiles.

But the imposition of such a duty would sooner or later result in heavy burden to American cotton growers. It would tend to stimulate cotton-growing in other parts of the world where already considerable progress has been made. Only in part would the reduction in exports of raw cotton be offset by an increase in the domestic demand. Even cotton would not offer, therefore, a perfect weapon for retaliation by means of export restrictions; and an amendment to the Constitution making possible the use of any such weapon would certainly arouse strong opposition from cotton-growing and other powerful domestic interests. In short, retaliation by means of export restriction would appear to be wholly out of the question.

Retaliation by the United States through trade restriction really means further import restrictions. This is the form it has always taken when attempted

by this country and it is the form also most often used by others. It is the sole means provided by the Tariff Act of 1922 for penalizing such diverse offenses by foreign countries as import duties on American products,[12] all manner of discriminations against American commerce,[13] export restrictions,[14] export bounties,[15] and other unfair methods of competition [16] in the American market.

Congress recognized, however, the danger to domestic interests in using this means. It left to the Executive, therefore, great discretion in applying it.[17] Thus in "extreme cases" of unfair methods or acts the President is directed to exclude from entry "such articles as he shall deem *the interests of the United States shall require* [to be excluded]." To punish discriminations he shall declare new and additional duties on products of the offending country "when he finds that *the public interest will be served thereby.*" And when the offending country attempts reprisal by increasing its discrimination, he shall exclude some or all of its products from importation, "if he deems it *consistent with the interests of the United States.*" (Our italics.)

The clauses here italicized clearly imply that in this form retaliation may easily recoil upon the

[12] United States Tariff Act of 1922, paragraphs 1536, 1541, 1543, 1548, and 1585.
[13] *Ibid.*, section 317.
[14] *Ibid.*, paragraphs 401 and 1301.
[15] *Ibid.*, section 303.
[16] *Ibid.*, section 316.
[17] *Ibid.*, paragraphs 1301 and 1701, and sections 316 and 317; perhaps in practice also under section 303.

nation that applies it. They recognize the difficulty of making a selection of products which it would be "consistent with the interests of the United States" either to exclude or to tax, when imported, more heavily than they are taxed already.

To appreciate this difficulty it should be remembered that the tariff which now regulates imports was constructed with a view exclusively to what its authors regarded as the national interest. Every duty in it was fixed at a rate as high as Congress deemed conducive to domestic prosperity. There was no compromise with other countries at any point. It was even provided that if any duty is found to give insufficient protection, or rather as expressed in the law, is found insufficient to "equalize" foreign and domestic costs of production, the President shall raise it by proclamation. Clearly, therefore, additional duties imposed as a penalty on a foreign country would disturb the adjustment of domestic industries and would raise the price of industrial products higher than is needed for what the law contemplates as adequate protection.

It is, of course, true that there is a long free list, and that the value of imports that enter untaxed exceeds two billions of dollars annually. But the free list was composed with complete disregard for foreign interests; it exists wholly and exclusively for the benefit of domestic industries and consumers.[18]

[18] Newsprint paper is the single finished product, ready for consumption, imported in significant quantities which is on the free list of the Act of 1922. Imports in 1928 were valued

It consists for the most part of commodities which this country can produce either not at all or not in sufficient quantities; and for the rest it is made up of articles that are not imported in any quantity because they are produced in the United States more advantageously than elsewhere.

Analysis of the foreign trade of the United States shows that imports have already been limited almost entirely to commodities with which it would be economically disadvantageous to dispense. In 1928 the value of imports amounted to nearly 4.1 billion dollars. But of this sum nearly 36 per cent consisted of raw materials which are needed by domestic industries; almost 19 per cent was partly manufactured articles which domestic industries engage in finishing; and over 23 per cent was foodstuffs mainly in the form of sub-tropical products and specialties for which domestic soil, climate, or labor conditions are poorly adapted. Only a little over 22 per cent was made up of finished manufactures, and even of this fraction a large proportion consisted of goods

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at $139,000,000. The political advisability of favoring the domestic newspapers is obvious.

Other finished products on the free list are agricultural machinery, barbed wire, binder twine, boots and shoes, and typewriters. The value of the combined exports of these articles in 1928 was $156,000,000 while that of imports was less than $16,000,000. Total imports of finished products free of duty cannot exceed one-half of one per cent of total imports.

Manufactured products for further use in manufacturing are also on the free list, for the most part, only in cases where the United States is on an export basis (for instance, leather and copper bars) or where she does not produce the raw material (for instance, tin bars).

that cannot be profitably turned out by domestic producers in the quantity or the quality desired.

Careful application of the policy of retaliation might minimize, but it could never wholly avoid, injury to domestic interests. Occasionally it might be found that retaliation could feasibly take the form of limiting imports of luxuries, the lack of which would involve no serious national burden.[19] Few of the countries that now exercise controls could be seriously affected by such restrictions, but one or two might. Again it might be found expedient to limit imports of articles from a country maintaining export restrictions in cases where the same articles are procurable from other countries, so that domestic purchasers would not be entirely deprived of needed supplies. Some of our imports from Germany, for example, would fall in this category. But consumers would seldom escape injury altogether. For if restriction is to be felt as a penalty it must be applied to some product which the offending country has been selling to the United States in quantity; and a product is never imported in such quantity without good economic reason—such as greater cheapness or better quality.

The burden from shutting out imports for purposes of retaliation might in some cases prove to be only temporary; in others, permanent. If, in the course of time, the higher price stimulated produc-

[19] In 1928 imports included, for example, perfumes and cosmetics worth about $6,000,000, unmanufactured tobacco worth over $55,000,000, diamonds worth over $57,000,000, and many other luxuries and exotic products.

tion in the countries not subject to the restriction, the price might then go down to the original level, and the damage to domestic interests would be temporary. But what might also happen is that the higher price would tempt domestic enterprise and capital to undertake production of the article involved, unless an internal tax were levied to prevent this outcome. The result would be that retaliatory restrictions would tend to call into existence branches of domestic industry that must perish if the price fell again. To save those engaged in these industries one of two things would be necessary. Either their investments would have to be made good by the government, as was done after the World War for the producers of "war minerals"; or else restrictions that were intended to be only temporary would have to be made permanent even though the offenses against which they were aimed had meanwhile ceased. In the latter case, the new industry might possibly in time outgrow the need of protection; but any such outcome would be purely fortuitous and entirely foreign to the purpose originally intended in imposing the restrictions.[20]

[20] There is one other condition under which an import restriction would not necessarily hurt any domestic interest and could sometimes be made to penalize the very industry that practiced the export restriction. Under certain conditions, if the price charged for the article has been a full-fledged monopoly price, imposition of a heavy import duty upon the article itself may be feasible. When a foreign monopoly charges for its products "the highest price that the traffic will bear," its sales and its profits diminish if the price goes still higher. Accordingly, when an import duty on its product is raised it must either reduce its charge so

There is, in short, no way in which a policy of retaliation could be applied without injuring domestic interests. By judicious application of the policy, greater burden might sometimes be inflicted upon foreign producers than upon domestic consumers. But seldom, if ever, could a very considerable burden to consumers be escaped. Nor is that all. For account must also be taken of the manner in which the burden would be distributed among domestic citizens.

Retaliation usually discriminates unfairly among domestic interests. The burden imposed must usually be borne in large part by classes of citizens for whom it is offset only partly, if at all, by any gain that would come from the withdrawal of the objectionable foreign control against which retalia-

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as to keep the duty-paid price the same as before or must suffer a loss through smaller sales. Theoretically, if it has really been charging all that the traffic will bear, and if it knows its own interest, the monopoly will reduce the price. How far it will pay to do so will depend on the elasticity of the demand for the product. If the demand is elastic, tending to fall off greatly in proportion to the increase of price, the monopoly may be forced to reduce its charge by almost the full amount of the duty. Domestic interests will then suffer but little from the import restriction; while at the same time the government will have obtained added revenue. If on the other hand the demand is inelastic, tending to fall off but little when prices increase, then most of the burden of superimposing an import duty upon the monopoly price will fall upon domestic consumers. The efficacy of this means of retaliation depends, therefore, upon the facts of the particular case. But in practice the facts will not always be easy to discover. There is no experience upon which to draw, for no attempt has ever been made to break down a monopoly's price by means of an import duty on its product.

tion is aimed. In practice, retaliation would probably take the form either of a countervailing duty or of measures designed to put general economic pressure upon the foreign country. Both would burden chiefly persons other than those in whose behalf retaliation was applied. A countervailing duty upon a finished article to offset an export duty upon the raw material would benefit the manufacturer at the expense of the consumer.[21] And duties imposed upon articles selected because of the pressure they would exert upon foreign countries would fall upon consumers of the special classes of goods rather than upon the public at large or upon those who would most largely benefit by concessions obtained from the foreign country.

The burden to domestic interests may not even end, however, with that arising from the objectionable controls and the retaliatory measures designed to secure their removal. Unfortunately, that is likely to be only the beginning of the story:

Retaliatory measures are apt to provoke counter-reprisals. There is no reason to suppose that any country would submit to such measures more readily when aimed against export restrictions than when aimed against other practices. It must be antici-

[21] Import duties on newsprint pulp and paper, for example, could be made to countervail the Canadian export restrictions on pulpwood. That is to say, whatever advantage was given to Canadian mills by preferred access to raw materials might be offset, so far as the American market is concerned, by an import tax on the finished product. Such a tax would obviously benefit newsprint pulp and paper mills on the American side of the boundary. But it would also be a burden to American consumers of newsprint paper.

pated that in general, however reasonable and moderate are the measures taken to offset the most aggressive attempts of foreign countries to exploit their natural monopolies, the measures will be resented by the public and by the governments of the foreign countries. The public at least will hear only one side of the case. It will believe the most exaggerated statements concerning the beneficence of the export controls and the disastrous consequences to be anticipated if they are broken down by outside pressure. The government will be afraid to appear to yield to foreign pressure.

Russia retaliated in 1901 when the United States assessed a countervailing duty upon bounty-fed sugar.[22] When, at the end of the last century, Canada began to discriminate against German, and in favor of British, products, Germany denied to Canadian products the benefits of her minimum tariff rates. Canada met the measure by levying additional duties on German products. With the advantage of being the less developed country, Canada continued to penalize Germany until the latter, as the greater loser, gave way and in 1910 granted to Canada her minimum rates in spite of Canada's continued discrimination in favor of Great Britain.

In the event of a tariff war the United States

[22] Russia's denial that her financial legislation conferred an export bounty upon sugar only makes the case a better illustration. In international dealings, even more perhaps than in domestic, unfair and unreasonable acts are likely to be defended with all the more heat when there is difficulty in making a reasonable defense of them.

could without doubt inflict great loss on the commerce of any country with which she trades. So great, moreover, are the resources and so diversified the industries of the United States that she could doubtless endure the domestic effects of such a war against a single country without a collapse of general prosperity. But it is a mistake to suppose that she would necessarily suffer less injury than she would impose. It would hurt Japan, for example, if the United States should retaliate against the camphor monopoly by means of discriminatory import duties on Japanese chinaware and cotton specialties. But it would bring disaster to the great American silk industry if Japan should respond with discriminatory export duties on raw silk.

Economic pressure to coerce another country into abandoning unfair and discriminatory practices has little better chance of success than if the pressure were directed to driving it into any other unpopular course. It is not generally realized that financial and industrial power does not measure a country's ability to exert economic pressure. In tariff wars the least developed countries, that is those which export little besides raw materials, may occupy the strongest positions. A committee appointed by the government of India in 1920 concluded that even if India should adopt a discriminatory tariff system the United States would be unlikely to attempt retaliation "and it seems probable that they could not do us much harm if they did."[23] Under the

[23] U. S. Tariff Commission, *Colonial Tariff Policies*, p. 349.

Tariff Act of 1890 the United States penalized Venezuela, Colombia, and Haiti and cut off three-fourths of their exports to the United States without making them yield concessions. But to cut off even a much smaller proportion of the imports from any industrial country would strike it a severe blow.

III. THE INADEQUACY OF THE NATIONAL APPROACH

It is manifest, then, that the lines of national action available to the United States for obtaining relief from foreign controls of exports of raw products are all limited in their effectiveness. Non-resistance is likely to do more harm than good. Passive resistance, such as has been employed in the past, has obviously not eliminated the practice. It has been merely irritating without being effective. Retaliation in kind by the organization of export controls of cotton and other products is subject to constitutional and to other serious obstacles. Retaliatory import restrictions and tariff wars would be costly and provocative, and by no means necessarily effective in securing removal of the objectionable controls.

A policy of economic warfare may conceivably have to be employed in an effort to obtain relief and to prevent further extension of control. If retaliation is attempted, it will be necessary to make careful and expert study of the commerce with offending countries so as to ascertain what sort of penalties would be most effective against them while involving the least possible injury to the United States.

In that way the burden of retaliation upon domestic interests may perhaps be made smaller than the burden of the control from which relief is sought. It will be necessary also to display firmness and consistency of practice instead of the sporadic expressions of resentment that have characterized American policy in the past. It is possible that a determined use of retaliation, even though it were to cost the United States as much as it did the other country, might ultimately secure the abandonment of foreign restrictions. And even if it were to cost the United States more than the offending country, in the long run the cost might perhaps be justified.

But recourse to retaliation, with its almost inevitable train of recrimination and reprisal, is obviously something that should be held in reserve for use only after peaceful means of securing relief have failed. It is an undesirable and a costly weapon even for so powerful a nation as the United States; and it can hardly be better adapted for use by other consuming countries. Ultimately, after a long period of costly economic warfare and international discord, some kind of agreement or tacit understanding between the disputants would presumably be reached. Would it not be better to come to an agreement before, rather than after, so much harm has been done?

CHAPTER XII

THE INTERNATIONAL APPROACH

We have shown that reliance upon independent national action is not the way toward a peaceful and a permanent solution of the problem with which this book is concerned. In the absence of any alternative to independent action that held promise of immediate effectiveness, nations have in the past been compelled to rely very largely upon their own resources for relief. To endeavor, once an emergency has arisen, to meet it by appeals to international opinion or by belated efforts to secure some form of international organization and co-operation has seemed slow and uncertain.

Nevertheless, government control of exports of raw products constitutes merely one of a large and increasing number of economic problems which, because of their essentially international character, do not lend themselves to national solution. It is in the international approach that hope for genuine and lasting progress really resides. What is clearly demanded is a sincere effort to arrive at some sort of international agreement as to what is fair and to provide adequate machinery for the interpretation and application of such principles as may be agreed upon. It is accordingly the purpose in this concluding chapter to describe the extent of the progress

thus far made, in both discussion and action, toward establishing such international machinery, and to indicate what further steps appear to be necessary.

I. A DECADE OF INTERNATIONAL DISCUSSION

During the decade that has elapsed since the World War the question of distribution of raw materials has been the subject of serious discussion in various countries, as well as at important international gatherings. The stupendous task of post-war economic reconstruction was from the start made more difficult by obstacles to a free distribution of essential raw materials. Restrictions imposed during the War had to be liquidated, and new hindrances created after the War had to be considered in the light of their effects on the restoration of normal processes of economic life in war-torn Europe, as well as elsewhere in the world. The discussion and action that have come out of these conditions have not, of course, been confined to the problem of government control of exports of raw materials; nor even, for that matter, to the broader problem of distribution of raw materials in general. All manner of hindrances to trade have received attention. For our purposes, however, a brief review of the trend of discussion and action with reference to raw materials is sufficient.

Several important proposals for dealing with the problem of raw materials were discussed during the early post-war years. These ranged all the way from recommendation of facilities for gathering and disseminating statistical data to plans for creating

an international agency for the distribution of raw materials.

At the Peace Conference, a special committee on raw materials was created, but its deliberations led to no practical results. Equally fruitless were the discussions in the Supreme Economic Council. This body gave much attention to raw materials in the course of its consideration of trade restrictions in general. It pronounced in favor of a removal of "artificial economic barriers"; and its declarations to this effect were endorsed by the International Financial Conference at Brussels in September and October, 1920, which recommended that "each country should aim at the progressive restoration of that freedom of commerce which prevailed before the war." [1]

One of the earliest concrete proposals with regard to the distribution of raw materials was made at the International Labor Conference, held at Washington, D. C. in November, 1919, when a resolution was proposed by the Italian Workers' Delegate, M. Gino Baldesi, calling for a study by the League of Nations of this problem in connection with the question of unemployment.[2] The resolution was defeated by a

[1] *Brussels Financial Conference: The Recommendations and Their Application*, League of Nations document, 1923, p. 226.

[2] In his statement defining the terms of the proposal, the author of the resolution recommended that "Whereas the inadequate supply of raw materials necessary for industry is the chief cause of unemployment in many countries, whilst in other countries which produce these raw materials unemployment is often due to over-production, . . . the Conference should draw the attention of the League of Nations

vote of 43 to 40, but the closeness of the vote indicates the interest which it had aroused at the Conference.[3]

A similar proposal was made and unanimously carried ten months later at the International Miners' Congress, held in Geneva. In its resolution, the Congress expressed "the desire that there be constituted within a brief period an international office for the distribution of fuel, ores, and other raw materials indispensable for the revival of a normal economic life."[4] The resolution was communicated to the Government Body of the International Labor Office, which decided to negotiate with the League of Nations for "the constitution of an International Office of Statistics of prices and supplies (the first of which might deal with coal), attached to the Economic and Financial Section of the League of Nations, . . . in such a way that the International Labor Office shall be represented on it [the International Office of Statistics], and through the medium of its officers or members of its Governing Body follow carefully from day to day the investigations made and the results obtained, and thus respond practically to the aspirations and desires expressed

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to the importance of an equitable distribution of raw materials in preventing unemployment and to the expediency of setting up a permanent committee which would guarantee this equitable distribution among the various countries, according to their present and future industrial requirements." *Études et documents*, published by the International Labor Office, Series B, No. 2, 1920.

[3] *Ibid.*

[4] *Ibid.*, Series A, No. 7, 1920.

in the resolution of the International Miners' Congress." [5]

The International Chamber of Commerce, at its first meeting, held in Paris in 1920, passed a resolution recommending the gradual removal of import and export embargoes. A year later, at its second meeting, held in London, the Chamber passed the following resolution dealing specifically with the problem of raw materials:

> . . . Whereas every tax on export of raw materials must necessarily increase the cost of production and thereby hinder economic development and prevent economic restoration; and
>
> Whereas it is desirable, as far as possible, to put a stop to rivalries between nations in their search for raw materials, to stamp out the cause of economic conflicts which may threaten peace, to do away with the natural inequality arising from the fact that the riches of the world are unequally spread over its surface, and to assure the rapid restoration of the world's commerce;
>
> This Congress of the International Chamber of Commerce recommends the abolition of such export taxes as Governments have imposed or may impose on the free movement of the raw materials which are included in the list attached hereto.
>
> In the exceptional case of certain countries being obliged, in order to balance their budget, to maintain provisionally on those materials statistical or revenue duties imposed upon exports, these duties should be applied without any discrimination whatever as regards countries.[6]

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[5] *Bulletin* of the International Labor Office, November 3, 1920.

[6] *Report of the Trade Barriers Committee of the International Chamber of Commerce*, document of the International Economic Conference, 1926. The list of raw materials

The resolution speaks for itself. Notwithstanding uncertainty as to what would be an exceptional case under its terms, it is clear from the text and from the importance of the products listed that the resolution makes significant and far-reaching proposals.

An extensive inquiry into the problem of raw materials was undertaken in 1921 by the League of Nations. In consequence of the increasingly widespread and insistent discussion of the subject, the Council of the League, at its meeting held at Brussels on October 25, 1920, had passed the following resolution, which was later approved by the Assembly of the League:

> The Council has fully considered the difficulties experienced by numerous countries in assuring the import of raw materials essential to their welfare and even to their existence, and has requested the Economic Section of the Economic and Financial Committee to study: (a) the extent and nature of their requirements; and (b) the causes of these difficulties. . . . The effects of the existence of monopolies will be very specially considered.

In pursuance of this resolution, the Economic and Financial Committee drew up two comprehen-

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attached to the resolution was as follows: "Untanned hides, skins and furs. Wool in bulk or wool skins. Raw horsehair etc. Silk in cocoon, raw silk, floss silk or silk in bulk. Raw materials for fertilizers. Gum in a raw state, india rubber, guttapercha. Unprepared timber. Raw cork. Raw cotton. Flax, hemp, jute and other vegetable fibres in a raw state. Ores and mineral products. Natural metals. Precious metals (gold, platinum, silver etc.) Mercury. Filings and waste of metals. Stone and earth employed in construction and different industries, etc. Coal. Mineral oil. Oilseeds and fruits not used as food in their imported state."

sive questionnaires, which were sent to practically all the countries of the world, and it invited a group of economists and statisticians, headed by Professor Corrado Gini, to study the replies and to collect other data. The results of this investigation were embodied in a report submitted to the League Council.[7]

The investigation showed clearly that, to the extent to which they were not caused by financial and exchange difficulties, the restrictions on the distribution of raw materials were part and parcel of the general system of trade barriers which became established after the War. On the specific problem of the effects of monopolies it elicited no information, principally because these effects could not at the time be definitely distinguished from those of the general economic disorganization that grew out of the War.

In referring to the results of this investigation, the Economic and Financial Committee stated certain general principles which in view of their singular importance to international commerce deserve especial emphasis:

> There is no question of challenging the incontestable right which States have to dispose freely of their natural resources, or of the output of their countries in respect of raw materials. It is legitimate that in exceptional circumstances they should be anxious to reserve them to themselves, and that they should have the power to subject them, at any time, to a régime in conformity with their natural economy. But it is not less incontestable that raw materials produced by one country being in

[7] *Report on Certain Aspects of the Raw Materials Problem*, League of Nations document, 1922.

many cases essential to the economic life of other States should not, unless in exceptional cases, be the object of restrictions or of differential regulations of such a nature as to injure the production of such States, or to impose upon them a systematic inferiority. It is undesirable particularly that measures of restriction taken by producing countries to meet exceptional situations should be so prolonged or altered as to change their character and from being acts of precaution or defense to degenerate into measures of economic aggression.

The Committee then directed attention to the far-reaching consequences of employing under normal conditions such measures as "weapons of economic warfare," and it recommended a number of immediate remedies for the existing abnormal conditions. It pronounced against creating an International Office for the distribution of raw materials, of the kind advocated by the International Miners' Congress, because of insuperable difficulties involved in organizing it and its probable inefficacy even if put into operation.

The problem of raw materials was prominently discussed at the World Economic Conference. This Conference, convoked by the League of Nations in May, 1927, dealt with a large variety of economic questions but its attention was centered very largely on international trade. As regards raw materials, it had before it the results of important work in the field already performed by the economic organization of the League Secretariat.

During the period which elapsed between the investigation of the raw materials problem in 1921 and the convocation of the World Economic

Conference, the League economic organization had not concerned itself specifically with that problem, but had treated it rather as a part of the general problem of restrictions on international trade. In pursuance of a resolution passed by the League Assembly in September, 1924, the Economic Committee of the League had been engaged in preparing for a diplomatic conference for the purpose of negotiating "an agreement between States Members of the League and States non-Members with a view to the final suppression of import and export prohibitions and restrictions." By the time the Economic Conference met in 1927, the Committee's labor had advanced sufficiently for the date of the diplomatic conference to be fixed for November of that year and for a draft convention to be prepared for preliminary submission to the Economic Conference.

The Conference endorsed the draft convention as "a very satisfactory basis for the Diplomatic Conference convened for November 14, 1927,"[8] which "should be utilized to lead to a prompt general agreement permitting the greatest possible number of nations by their concerted and simultaneous action to bring about favorable conditions for the recovery and development of the production and trade of all countries." In its final report, however, the Conference called attention, by implication, to the limitations of the draft convention proceeding from the interpretation placed by the League Economic Committee upon the terms of reference contained in the

[8] The Conference actually met on October 17, 1927.

1924 resolution of the League Assembly, under the authority of which the Diplomatic Conference was being convoked. It expressed a warning against a "merely formal" acceptance of the proposed convention, and recommended that "the application of the principles laid down in this draft [convention] should not be indirectly defeated by such means as export duties," [9] a discussion of which, the Economic Committee decided, was outside its terms of reference.

Though the Committee had been compelled to exclude export duties from its consideration, the Economic Conference was not. Accordingly, after extended discussion, it adopted the following resolution: [10]

> The Conference is of opinion that the free circulation of raw material is one of the essential conditions for the healthy industrial and commercial development of the world.
>
> It is therefore of opinion that any export tax on raw materials or on the articles consumed by producers which has the effect of increasing the cost of production or the cost of living in foreign countries tends thereby to aggravate the natural inequalities arising from the geographical distribution of world wealth.
>
> The Conference therefore considers that export duties should only be resorted to to meet the essential needs of revenue or some exceptional economic situation or to safeguard the vital interests of the country and that they should not discriminate between different foreign destinations.

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[9] World Economic Conference *Final Report*, League of Nations document, 1927, pp. 22-23.

[10] *Ibid.*, p. 33.

The Conference therefore recommends:

(1) That the exportation of raw materials should not be unduly burdened by export duties or any other taxes and that, even in cases where such duties or taxes are justified by fiscal needs or by exceptional or compelling circumstances, they should be as low as possible;

(2) That, in any case, export duties on raw materials should never be imposed for the special purpose of subjecting foreign countries using such materials to an increased burden which will place them in a position of unfair inferiority as regards the production of the finished article;

(3) That export duties on raw materials, whether levied for revenue purposes or to meet exceptional or compelling circumstances, should never discriminate between different foreign destinations.

Of this resolution dealing with export *duties*, its meaning and adequacy, more will be said below.[11] We return, meanwhile, to the draft convention concerning import and export *prohibitions* and *restrictions*, preparation for the formal adoption of which was going steadily forward. In October, 1927, the Diplomatic Conference which was to consider it convened at Geneva and out of this Conference emerged a convention based upon the draft prepared by the Economic Committee of the League of Nations. Thirty-two nations, members of the League of Nations, and three non-members (including the United States) took part in the Conference, although only seventeen member states and one non-member signed the convention. The United States was not among the signatories, but she has

[11] See p. 338.

subsequently signed and, with slight reservations, ratified the convention.

The Convention for the Abolition of Import and Export Prohibitions and Restrictions was the first important international action affecting the problem of control of trade in raw materials. The Convention is not, to be sure, confined to raw materials. It relates to all prohibitions and restrictions with the important exception of customs duties. Nevertheless, it is the first important multilateral agreement that has included within its scope any significant part of the problem of control of exports of raw materials.[12]

In accordance with Article 2 of the Convention, "subject to the exceptions provided for in the following articles [4, 5, and 6], the High Contracting Parties undertake to abolish within a period of six months from the date of the coming into force of the present convention, in so far as the respective territories of each of them are concerned, all import and export prohibitions and restrictions and not thereafter to impose any such prohibitions or restrictions." Pending this action, "the High Contracting Parties will adopt all appropriate measures in order to reduce existing prohibitions and restric-

[12] An earlier multilateral agreement, the Brussels Sugar Convention of 1902, strove to eliminate bounty-fed export dumping of beet sugar by certain European countries. But although the agreement dealt with a phenomenon that may equally well require attention as an unfair practice in international trade, the problem was entirely different from the one which here concerns us. It had to do with artificial stimuli to, not artificial restraint of, exports.

tions to a minimum and will refrain from imposing any new prohibitions or restrictions."

Articles 4, 5, and 6 provide for a wide range of exceptions. Article 4 enumerates the classes of restrictions which are customarily reserved to sovereign states, that is, those involving public safety, public health, protection of national treasures of artistic, historic, or archaeological value, gold, etc. Article 5 provides that "nothing in this convention shall affect the right of any High Contracting Party to adopt measures prohibiting or restricting importation or exportation for the purpose of protecting, in extraordinary and abnormal circumstances, the vital interests of the country," on condition, however, that measures of this character "shall be applied in such a manner as not to lead to any arbitrary discrimination against any other High Contracting Party" and that "their duration shall be restricted to that of the causes or circumstances from which they arise." Article 6 provides for the temporary continuation of specific restrictions by various countries, enumerated in an annex to the Convention, because of the existence of circumstances which make their immediate abolition difficult. This annex enumerates reservations with regard to temporary restrictions on the part of no less than fifteen countries. Through subsequent negotiation, the number of reservations was greatly reduced.[13]

[13] For the text of the Convention see Appendix D, p. 421.

Additional instances of international agreement as regards raw materials are those relating to hides, skins, and bones. These were among the commodities with regard to which a large number of countries claimed the right to make temporary reservations. But in the course of the Conference it was discovered that there was possibility of an agreement among the countries concerned providing for concurrent abolition of restrictions. Provisions for negotiating such an agreement were made in paragraph 3 of the Final Act of the Conference, and on March 16, 1928, as a result of a special conference on the subject, two conventions were signed by the representatives of twelve countries, dealing respectively with hides and skins and with bones.

These two conventions go beyond the scope of the general Convention negotiated at the November Conference. They deal not only with the general subject of prohibitions and restrictions, but also with export duties. In the case of hides and skins, the signatory powers undertake to abolish all such duties other than so-called "statistical duties," that is, duties imposed simply for the purpose of securing more accurate trade statistics. Upon the request of one-third of the signatory powers, revision of the treaty can at any time be brought up for consideration, and any power disagreeing with the revision reserves the right to denounce the convention. In the case of bones, a maximum limit is set for export duties, uniform for all countries concerned and fixed for a period of two years; and a new conference is provided for at the expiration

of that period for further consideration of the matter.[14]

Both the general conventions and the two special protocols carry provisions for arbitral and judicial procedure with regard to possible disputes and for further action in the case of points still left in suspense.[15]

II. THE NEED OF FURTHER DISCUSSION AND ACTION

The foregoing survey of post-war international discussion and action shows clearly that the accomplishment to date has not been very great. Even in the limited scope within which action has been attempted, the exceptions noted have been so wide and numerous as to minimize the immediate significance of the agreements. Nevertheless, the agreements are a distinct step forward and they definitely point the way to more extensive action for the purpose of achieving larger results.

They are significant in several respects. They are, as we have said, the first multilateral agreements touching the problem of control of trade in raw materials. Directly or by implication they represent agreement in principle as to what is fair in regard to the matters falling within their scope. The Geneva Convention very clearly involves the principle that in general the presumption is against all prohibitions and restrictions (other than cus-

[14] For the text of these conventions see Appendix D, pp. 451-67.

[15] See p. 334.

toms duties) on imports and exports, whether of raw materials or of other goods; that the burden of proof is on those who would seek to justify exceptions to the principle. The protocols on hides, skins, and bones go a step further. They definitely imply that, in respect to certain raw materials at least, there is a presumption against imposing export duties and hence that these should be kept low or abolished. All three agreements invite the use of existing international machinery for settling disputes and involve a distinct moral, if not legal, obligation on the part of the signatories to submit their differences to some form of arbitral or judicial procedure.

Particularly suggestive, morever, are the protocols on hides, skins, and bones as a possible method of approach in dealing with the problem of government control of exports of raw materials. They indicate real hope of success in negotiating multilateral agreements concerning separate commodities or groups of commodities once there is international assent to general principles.[16] Such agreements would denote genuine progress by giving concrete expression to a more general code of principles as to what is fair in regard to restrictions on exports of raw

[16] It is interesting to note that the recent tendency in the international discussion of the customs tariff problem is also in the direction of attempting to negotiate agreements with regard to separate commodities or groups of commodities, rather than of working for international agreements with regard to general tariff levels. On this point see, for example, *Report of the Economic Consultative Committee*, League of Nations document, 1928.

materials; and because of their more limited scope they might perhaps be more easily reached than would more comprehensive agreements.

Granting the foregoing, however, the existing agreements fall far short of meeting the requirements of the situation with which this book is concerned.

More effective machinery than any so far devised is needed for dealing with the problem of government restrictions on trade in raw materials. Up to a point, the Geneva Convention for the Abolition of Import and Export Prohibitions and Restrictions, in its provisions regarding arbitral procedure, sets up such machinery. But it is by no means sufficient. Nor do the provisions for future action in the protocols on restrictions of trade in hides and bones entirely suffice.

Article 8 of the Geneva Convention provides a variety of means for settling disputes regarding the interpretation or application of the provisions of the Convention. The parties to the dispute, if they all so agree, may "submit the dispute . . . to such technical body as the Council of the League of Nations or the parties concerned may appoint." The opinion rendered by such a body would be of a purely advisory character, and if not accepted by all the parties to the dispute would have no binding force. The parties concerned may then, by common agreement, "have recourse to any arbitral or judicial procedure which they may select, including reference to the Permanent Court of International Justice as regards any matters which are within the competence of that

Court under its statutes." In case of a dispute of a legal nature, the parties, this time "at the request of any of them," may "refer the matter to the decisions of the Permanent Court of International Justice or of any arbitral tribunal selected by them."

The value of the agreement is, however, greatly impaired by the limited scope within which it operates and by the absence of any legal obligation to abide by its provisions even in matters not exempted from its scope. In failing to deal with export duties the Convention fails to reach what has after all been the principal instrument for effecting government control of trade in raw materials. But even in respect to prohibitions and restrictions the exceptions covered by Articles 4, 5, and 6 are exempted from any arbitral or judicial procedure,[17] and these exceptions are so important that they may very largely frustrate the purpose of the Convention, especially as it affects raw materials. Thus, for example, in the protocol to the main Convention Canada explicitly excepts from the agreement all restrictions on imports or exports that are maintained by her provincial governments. Hence, the existing restrictions on exports of pulpwood and pulp are not affected. This is but one instance. Consider, further, the scope of exceptions based on considerations of public security, humanitarianism, and public health; the desire to afford protection to animals and plants against disease; the desire to

[17] The question as to whether an act is properly within the broad exceptions made in Articles 4 and 5 might perhaps, however, be arbitrable.

protect "in extraordinary and abnormal circumstances, the vital interests of the country"; or the exemption of products that "are or may in future be subject within the country to State control." Manifestly, these are broad and elastic exceptions to the general provisions of the Treaty.

The protocols regarding hides, skins, and bones are less limited in that they include export duties as well as other types of restriction. But in the matter of exceptions and provisions for settlement of differences in interpretation they rest explicitly on the provisions of Articles 4 to 13 (excluding 6) of the Geneva Convention, and hence the foregoing discussion applies also to them.

It is clear from what has been said that, so far as concerns the problem of government control of trade in raw materials, the main significance of the foregoing agreements arises, not from the machinery that they provide for dealing with that particular problem, but from the precedents that they set and the suggestions that they contain with reference to the possible provision of adequate machinery. Manifestly, there is need for further agreement in regard both to basic principles and to the provision of machinery for applying the principles and settling disputes arising from their interpretation.

International agreement on basic principles is the first requirement of the situation. The mere formulation of such principles will not, of course, wholly suffice. As in every phase of economic activity, government control of access to raw materials presents a developing and a shifting situation in which new

issues are constantly arising. No body of formal principles can anticipate such changing conditions in every possible aspect.

Nevertheless, agreement on principles is the first logical step. The mere endeavor to arrive at such agreement would furnish a background of discussion, a frank interchange of views, that should be generally helpful. Once consummated, moreover, such an agreement would facilitate discussion of issues that might otherwise be regarded as outside the sphere of international discussion. A nation feeling itself injured by an export restriction would at least be enabled to raise the issue without fear of being told that there is nothing to discuss, that the practice complained of is one concerning which a sovereign state has a right to do what it will. In short, such agreement would definitely remove the question from the status of a purely domestic matter.

But agreement on principles would do more than merely assure open and frank discussion of the merits of a particular case. It would definitely enhance the probability of peaceful settlement. A country will often arbitrate the interpretation of a treaty to which it is a party when it would refuse to arbitrate a question about which there is no treaty or accepted rule of international law. Even though such a country were not compelled by treaty to accept recourse to arbitral or judicial procedure, the very existence of an agreement on principles and the inclusion in the agreement of non-mandatory machinery for its interpretation would surely

strengthen the feeling of obligation to resort to such procedure. Finally, once a dispute has reached the stage of arbitration, the existence of basic principles and of a background of international discussion out of which they have emerged, should be distinctly helpful as a guide to the arbitrators.

It was, indeed, to the formulation of basic principles that the World Economic Conference and the Diplomatic Conference on Import and Export Prohibitions and Restrictions applied themselves. The World Economic Conference, as we saw above (page 327), even attempted a formulation of the principles which should govern the application of export duties. But the resolution that contained them had no official approval, and it is therefore without legal force.

Moreover, even if the resolution were given diplomatic approval, its provisions would be far too indefinite to provide an adequate basis for dealing with the problem of government control of exports of raw materials. There is distinct need for further clarification of the resolution. When, for example, can it be said that exportation is "unduly burdened" by duties? What is the nature of the "exceptional or compelling circumstances" which justify such duties? How is it possible to distinguish among the various purposes of duties a "special purpose" of subjecting foreign countries to an increased burden? What is a position of "unfair inferiority" as regards the production of the finished article? Granting that it is impossible to determine in advance precisely where the lines are to be drawn in regard to these

matters, it ought to be possible, nevertheless, to draw them with greater exactness than was done at the Economic Conference.

An international conference on government control of access to raw materials might be able to formulate adequate basic principles. Such a conference could very properly be called under the auspices of the League of Nations, and the United States could without any difficulty participate in it, just as she has taken part in practically all important economic conferences held under League auspices.

A conference on this special problem would have certain important advantages. Its chief object, of course, would be to sharpen and define the agreements and resolutions touching directly or indirectly upon government control of exports of raw materials that have been reached at earlier conferences. Quite obviously, a special conference would be able to discuss and develop the subject in greater detail than was possible at either the World Economic Conference or the Conference on Import and Export Prohibitions and Restrictions. Held under international auspices, it could bring together a much more imposing body of factual data than could possibly be done by private investigation or by the efforts of individual governments. It could perform an important educational function by emphasizing before the world the importance of finding some peaceful and orderly means of facilitating the solution of an increasingly vexing problem in the commercial relations of nations. And it could definitely prepare

the way for the next logical step in dealing with the problem, to which we now turn.

Establishment of international machinery for interpreting the principles agreed upon and thus gradually elaborating a body of "fair practices" is the next important step. Provision of an adjudicating agency for settling disputes in regard to the facts or to the interpretation of principles is, to be sure, not absolutely necessary in order to make agreement on principles useful. Such disputes might be handled as are other disputes on questions covered by treaties. They might simply become a part of international law to be enforced as well or as badly as are other parts. But in a field in which so many technical questions are bound to arise, peaceful settlement would be easier and decisions would in the long run be more satisfactory if a special body were established to deal with them. There would probably not be a single principle in the interpretation and application of which no conflict of opinion would arise, and it is out of the composition of these conflicts that a body of fair practices would gradually evolve.

Something of a parallel to what is needed in the international sphere is afforded in the national sphere by the Federal Trade Commission of the United States. Conflicts of opinion as to what constitute fair practices in domestic commerce are constantly before this Commission for examination and adjudication, and out of the decisions of the Commission has gradually been built up a body of

rules that is essentially a quasi-judicial code of fair practices.

Perhaps the most feasible procedure for setting up an international agency of this sort would be the establishment of a commercial division of the Permanent Court of International Justice. The suggestion is not a new one. In its resolutions the World Economic Conference called attention to the fact that "the present statute of the Court authorizes it to appoint experts or expert bodies to make enquiries or to give an expert opinion on any matter." It alluded to suggestions that have been made to the effect that "if at any time the amendment of the statute of the Court is contemplated, the opportunity might be taken of enabling the Court to establish a special section or special procedure for dealing with commercial questions." [18] The Conference did not pronounce on the suggestion, but its aptness in connection with the problem of government control of exports of raw materials is self-evident.

The hope of observance of "fair practices" lies in the development among nations of the opinion that they are to be observed rather than in any form of enforcement. Even if the nations should agree to submit their differences as to what constitutes "fair practice" in each particular case to the authoritative decision of a court specially constituted for that purpose, there is still a possibility that the party which has been declared in the wrong may not submit to the decision. In that case, each nation may attempt to enforce the decision against the

[18] World Economic Conference, *Final Report*, p. 35.

recalcitrant state, or several nations may act in unison for this purpose. The possible weapons for such enforcement are, of course, those of military or economic warfare. What was said in the preceding chapter as to the efficacy of these two forms of enforcement applies as much to international as to national action. For reasons there described, economic retaliation should be regarded only as a last resort, short of actual war. Nevertheless, it does constitute a ready and dreaded weapon for penalizing a recalcitrant state. Even the remote prospect of its use might well suffice to bring an offending country into line.

Infinitely preferable, however, would be the acceptance by nations of rules of conduct commonly agreed upon among them as equitable and the provision of adequate machinery for settling honest differences that may arise in respect to their application. For countries exercising control over exports of raw materials no less than for consuming countries such a course should in the long run prove advantageous. If, in the opinion of the producing countries, there are special circumstances that justify maintenance of the controls, if public opinion in consuming countries misunderstands the motives or exaggerates the burdens that accompany control, then surely no harm can come from allowing the case to go before a properly constituted international tribunal for investigation and adjudication. But if resentment in consuming countries—resentment that may sometimes be based largely upon misunderstanding or exaggera-

tion—is allowed to increase until it eventuates in retaliation and commercial war, both sides will be losers.

The mere assent by a large number of nations to principles and machinery for dealing with the problem will in itself be ample evidence of a common desire to avoid war or unnecessary friction. If the leading nations alone were to observe with reasonable consistency the principles agreed to, those principles would become established in practice and would be sanctioned by world opinion. Infringement would be rare and could perhaps be handled by diplomatic pressure.

In the last analysis, to borrow words of the World Economic Conference, observance of "fair practices" depends "not only upon the good-will of governments and Administrations but upon an informed and supporting public opinion throughout the world . . ." And these depend in turn upon "the development of closer international co-operation by scientific and educational institutions as well as the help of the Press and other agencies of importance for the information and enlightenment of the public."

APPENDICES

APPENDIX A

CHRONOLOGY OF THE DEVELOPMENT OF CONTROLS OF EXPORTS OF RAW PRODUCTS

Below is given a list of products that are subjected, or that have recently been subjected, to export control, together with a chronology in each instance of the outstanding events characterizing the development and the operation of the control. The list is not to be regarded as necessarily inclusive. To discover and to examine the merits of every possible case for the purpose of determining how far and in what sense it may be properly deemed an illustration of control would be a task far beyond the limits of this book. Certain instances in which there has been alleged to be some measure of national control to the disadvantage of foreign consumers have been deliberately omitted because the evidence has not appeared definite enough to warrant their inclusion. Illustrations are chromite, manganese and gutta-percha.[1]

[1] Manganese comes mainly from British India, Russia, and Brazil. American producers of ferromanganese assert that they have always had to pay more for this ore than their British competitors, and they cite the recent amalgamation of the British producers of ferromanganese with the Indian mining interests as evidence of a close relationship of the British group that has favored discrimination against Americans. On the other hand, Americans have had access to Brazilian and Russian ore. (Berglund, Abraham, and

In discussions of the subject there is a distinct tendency to characterize as controls cases where the production of the material is more or less concentrated within a particular country, even though there may be little available evidence that exploitation of these resources is subject to regulation that results in stringency of supplies to foreign consumers. Much of the discussion turns on the question of national self-sufficiency and national defense—the possibility that access to foreign supplies may be cut off—rather than upon the actual existence of systematic peace-time controls maintained for the benefit of the producing country or of particular economic groups concerned with the production and distribution of the material. If all the products of which particular countries happen to possess a monopoly or a quasi-monopoly of supplies were included, the list would indeed be long.

Some of the products listed are of major economic importance; others are of relatively minor importance. In most of the instances cited there has been some measure of government support of, or

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Wright, Philip G., *The Tariff on Iron and Steel*, Institute of Economics Series, 1929, pp. 49-50.) Concerning chromite (another of the alloys for steel manufacture, produced chiefly in Rhodesia, but also in quantity in New Caledonia and British India) the same sort of contention is made. (*Ibid.*, p. 50.) In the case of gutta-percha (used as an insulation for ocean cable, and produced chiefly in the Malay Peninsula and the East Indies) British control of the industry through a powerful buying and distributing combine has been alleged to prevail (Culbertson, W. S., "Raw Materials and Foodstuffs in the Commercial Policies of Nations," *Annals*, March, 1924, pp. 89-92); but there is little available evidence showing the extent to which this has led to stringency of supplies and higher prices to foreign consumers.

government participation in, the control. But in two instances—cinchona bark (for quinine) and quebracho wood (for tanning extract)—there has apparently been little, if any, direct government participation; and in a third, namely, Greek currants, the earlier participation of the government has largely ceased.

Camphor (Japan)

1899 Government monopoly of manufacture and sale established in Formosa.
1903 Monopoly system extended to cover Japanese production.
1907 Monopoly strengthened its hold on sales of camphor.
1913 Exports of Japanese crude camphor confined to requirements for celluloid only.
1918 Exports of Formosan crude camphor also confined to requirements for celluloid only.

Cinchona Bark, Quinine (Holland)

1892 Formation of first quinine accord of German and Dutch producers, resulting in rise of quinine prices and depression of prices of cinchona bark to the Javanese producers.
1894 Organization of Bandoeg factory in Java—destined to become the biggest single factor in the industry.
1913 First major quinine convention. Agreement between quinine manufacturers and producers of cinchona bark, guaranteeing a minimum price to producers of bark for a period of five years, obligating quinine factories to take over jointly the bark equivalent of 515,000 kilos of

quinine sulphate, prohibiting planters from selling bark to other than contracting factories, and authorizing the East Indian government to put up a factory with a maximum capacity of 12,000 kilos per year to supply itself and the native population.

Establishment of the Kina Bureau at Amsterdam, with directorate of six members (three chosen by producers and three by manufacturers) and a neutral chairman, to direct the operation of the foregoing agreement, with full power to allot supplies of cinchona bark and to fix prices of quinine in all the markets of the world. This was the first really comprehensive quinine convention.

1918 Expiration of the 1913 agreement and conclusion of a second accord, through December, 1923, between the Dutch factories (with certain foreign interests remaining outside) and about 90 per cent of the Javanese growers.

1924 Renewal of quinine convention, covering period January 1, 1924, to December 31, 1928, and based in large measure upon negotiations during 1921 with the union of producers adhering to the second convention.

1928 Legal proceedings by the United States Department of Justice against the quinine monopoly, culminating in "consent decree" prohibiting it from engaging in monopolistic operations *within the United States,* such as fixing resale prices, allotments of territory, etc.

Convention of producers and manufacturers renewed for five years. Thus, the plantation harvesting, allocation, and prices of bark and the prices of sale and resale quinine are

controlled from Amsterdam by a group of related organizations, dominated by the Dutch, in which nearly all Javanese planters and all the quinine manufacturers in the world, except in the United States, are interested.

Citrate of Lime (Italy)

1910 Government control over citrate of lime factories in Sicily prescribed in July and November.

1924 New regulations for the control of citrate of lime factories promulgated March 9, 1924.

Coffee (Brazil)

1902 State of Sao Paulo undertook restrictions by placing prohibitive tax on new coffee areas.

1905 Policy of valorization officially adopted by State of Sao Paulo.

1906 First purchase of coffee by State of Sao Paulo under valorization plan.

1908 Further restrictive legislation adopted by State of Sao Paulo.
Government of Sao Paulo borrowed £15,000,000 from foreign bankers to aid valorization.

1917 Second valorization by Sao Paulo.

1920 Third valorization by Sao Paulo.

1921 The federal government of Brazil joined in valorization plan.

1922 Federal law of June 19 created permanent institute for the defense of coffee.

1924 Federal government withdrew from permanent defense project and government of Sao Paulo purchased federal warehouses and undertook the project.

1927 Sao Paulo, Minas Geraes, Rio de Janeiro, and Espirito Santo entered into defense agreement.

Cotton, Long Staple (Egypt)

1915 Egyptian government restricted acreage.

1921 Government again restricted acreage, the restriction continuing in 1922 and 1923. Government began the policy of purchasing cotton—a policy that has continued since that time.

1926 Government again restricted acreage and continued the restriction in 1927, 1928, and 1929. The law prohibited the planting of more than one-third of each man's holding to cotton. Government also opened a credit of £4,000,000 (Egyptian) for advances to the small cultivator on the security of any quantity of cotton ranging from 5 to 200 cantars (1 cantar equals 100 pounds).
Government offered to buy all cotton at a fixed price.

1929 Government again adopted policy of buying cotton at a fixed price.

Currants (Greece)[2]

1895 First annual retention law to deal with crisis brought about by overproduction of currants in Greece was passed. It required every exporter to deliver free to government warehouses currants to the extent of 15 per cent of quantity exported, or their cash equivalent.

[2] An excellent discussion of this case by J. Kipps appears in *Economic History* (a supplement of the *Economic Journal)*, Vol. II, No. 5, January, 1930, pp. 137 ff.

1896 Revocation of option to make cash payment in lieu of currants.

1899 Modification of retention law to cover ten-year period and to provide machinery for more flexible valorization.

Creation of Currant Bank by royal decree to manage retention of crop and to assist growers with loans.

1903-04 Government compelled Currant Bank to absorb surplus crop by buying all currants offered to it at fixed price.

1904 Retention plan reorganized. Cash export tax of 15 per cent replaced by equal tax in kind. Prohibitive tax laid on new plantations.

1905 Control of the industry passed from government into hands of the Privileged Company for the Development and Protection of the Currant Production and Trade, a largely foreign-owned, speculative, joint-stock company, under a 20-year charter.

1912-13 Intervention of Greek government provoked by action of Privileged Company in substituting cash payments for large proportion of retentions in kind in order to create profits. Court of Appeal in Athens adjusted situation by raising percentage of retention in kind to be collected.

1913 Government guarantee of dividend of 4 per cent for one year to Privileged Company in consideration of reforms in management of Company's affairs.

1914 Greek government with consent of British government raised retention quota by an additional 15 per cent of exports, making the total

retention 50 per cent, and relieved Privileged Company of many burdensome requirements.

1924 Greek government took over Privileged Company and contracted with National Bank for complete management of industry for one year.

1925 Rights granted to Privileged Company in 1905 transferred to Central Current Office, a co-operative association. C. C. O. is managed by committee of three, elected by administrative council of sixteen, comprised of eight representatives of growers; one each from Ministries of Agriculture, Finance, National Economy, and from the National Bank; one from the grape growers and two from the export trade; and one managing director and chairman. Ministerial representation is for the purpose of expert official advice and by virtue of government's interest in currant tax. The administration of C. C. O. as far as possible is outside Civil Service. It is an almost entirely independent activity. The retention scheme is still a dominant feature of its operations, but it has many other privileges and functions.

1930 Central Currant Office still in charge, with its control increasing rather than diminishing in the face of growing foreign competition.

Kauri-Gum (New Zealand)

1927 The government of New Zealand organized the Kauri-Gum Control Board. Up to May, 1928, the Board confined its operations to those of a small trader and to the collection of the tax authorized for its maintenance.

Mercury (Spain, Italy)

By far the greater part of the world's mercury—the principal uses of which are for fulminates, pigments, mercury vapor light, and drugs and chemicals—is produced by two countries, Spain and Italy. For many years Spain was the leading producer but in recent years Italian production has sometimes excelled and at all times closely rivaled the Spanish. The Spanish industry—founded chiefly upon the famous Almaden mine that produces over 95 per cent of the total Spanish output—is owned and operated by the government. The Italian industry is partly in private and partly in public ownership, the Idrian mines (formerly Austrian) being government owned. The entire industry, however, is under government domination, its operations being controlled through a consortium of the producers. No attempt is made here to present the chronology of events characterizing the development of control in each of the countries. In Spain control by the government runs back far into the past. Certain recent developments of importance may, however, be noted.

1916 Administration of Spanish mines placed in hands of a political commission of seven members, empowered to regulate prices, recommend mining improvements, supervise labor, etc. Control actually assumed in 1918.

1928 Dating from October 1, a ten-year international cartel, sanctioned by the Spanish and Italian governments, went into effect. The agreement is said to provide for regulation of production according to market conditions, a division of output on the basis of 55 per cent

to the Spanish and 45 per cent to the Italian mines, appointment of a president and a council, with the chairmanship alternating between the two countries, and establishment of a joint sales bureau, with headquarters at Lausanne, Switzerland.

Nitrate (Chile)

1879 Heavy export tax placed on nitrate by Chilean government.
1884 First syndicate of nitrate producers.
1891 Second syndicate of nitrate producers.
1894 Combination of producers of iodine, a by-product of Chilean nitrate.
1896 Third syndicate of nitrate producers.
1897 Export tax of Chilean government on nitrate established at its present level.
1901 Fourth syndicate of nitrate producers.
1906 Fifth syndicate of nitrate producers.
1913 Sixth syndicate of nitrate producers.
1919 Formation of Chilean Nitrate Producers' Association.
1924 Renewal of agreement of Chilean Nitrate Producers' Association.
1927 Abandonment by Producers' Association of sale of nitrate at fixed price through a single selling agency. Competitive selling for 18 months.
1928 New agreement of Producers' Association provided a more flexible marketing system and price policy with changes to meet growing competition from by-product and synthetic nitrogen.
Bonus offered by Chilean government to producers during 1928-29 equivalent to any

reduction in price of German product which syndicate might make.

1929 Tripartite agreement between the Chilean industry and German and British manufacturers of synthetic nitrogen.

Pearlshell (Australia)

1927 Australian government passed Pearlshell Export Control Act for regulating the export trade in ocean pearlshell (used for button manufacture, etc.). The Act sets up a Pearlshell Control Board consisting of a chairman, appointed by the government and two members selected by the producers of pearlshell; also a London Agency whose function is to keep the Board currently advised as to prices, etc. Exports are permitted under the Act only under licenses issued subject to the restrictions and conditions recommended by the Board. After existing contracts expire, no others are to be made except with the approval of the Board. The Board is given full authority over the handling, marketing, and storage of pearlshell, terms of sale, etc. The Act does not take effect, however, until certain preliminary conditions are fulfilled and a proclamation is issued by the Governor-General putting it into effect. This has not yet been done. Meanwhile it is understood that supplies for the United States are controlled by an exclusive contract with an American dealer.

Potash (Germany, France)

1858 First potash monopoly in connection with salt mine owned by Kingdom of Prussia.

1864 Price agreement for chloride of potash.
1876 Second price agreement.
1879 Limitation of yearly output of carnallite by Prussian government.
1880 Restriction of kainite production.
1883 First sales syndicate for muriate of potash.
1884 Price discrimination against foreigners introduced by kainite syndicate.
1888 First general potash syndicate dominated by Prussian government.
1898 Renewal of syndicate for three years.
1901 Expiration of 1898 agreement and renewal.
1905 Reorganization of syndicate as limited liability company.
1909 Expiration of 1905 agreement and reorganization of syndicate.
1910 Potash law of May 25 providing for control of prices and production by the Imperial German Government.
1919 Establishment of federal council to control entire potash industry.
1921 Supplementary regulatory legislation.
1924 Rationalization of the German industry. Franco-German agreement fixing prices in, and dividing sales to, the United States.
1925 Franco-German agreement dividing sales throughout the world.
1926 Franco-German agreement for a joint commission of control and common sales agencies (still in effect).

Pulpwood (Canada)

1891 British Columbia prohibited export of unmanufactured timber cut from Crown lands.

1900 Ontario prohibited exportation of unmanufactured pine.

1902 Ontario extended prohibitive legislation to pulpwood.

1906 British Columbia taxed timber, pulpwood, and shingle-bolts cut on Crown-granted lands and exported from the province without further manufacture.

1907 Federal embargo placed on pulpwood from federal Crown lands of the Prairie Provinces and British Columbia, to become effective in 1908.

1910 Quebec prohibited exports of pulpwood cut from Crown lands.

1911 New Brunswick placed embargo on pulpwood cut from Crown lands.

1916 Newfoundland required that timber be manufactured before exportation.

1923 The Canadian Parliament authorized prohibition of exportation of pulpwood cut on private lands as well as on public holdings.

1925 Ontario prohibited the exportation of hard woods cut on Crown lands.

1926 Nova Scotia authorized an embargo on pulpwood, effective May 1, 1927.

Quebracho (Argentina, Paraguay)

1904 Formation of the Compañía Forestal del Chaco, the first large company producing quebracho (tanning) extract. The virtually exclusive source of supply of this material is the quebracho forests of the Chaco region of Argentina and Paraguay.

1906 Merging of the foregoing company into the Forestal Land, Timber and Railways Co., now known as La Forestal, under British control. This company has since remained by far the largest of the producing companies, with holdings in associated companies and marketing outposts that have enabled it largely to dominate production and sale of quebracho extract.

1916 Formation of agreement between La Forestal and leading remaining producers of quebracho in Argentina and Paraguay to reduce output.

1919 Renewal of agreement, after a lapse of a year in 1918, including about 70 per cent of producers (a smaller proportion than in earlier agreement), with La Forestal acting as selling agent under contract, with minimum price guarantee, limitation of output, etc.

1922 Dissolution of the selling combination.

1926 New selling pool organized by La Forestal. Production and prices controlled by a committee of five, one each from five companies, of which La Forestal and Refinería Argentina, known as "The Trust," are the most powerful. Production (maximum) allocated to each company on basis of its largest single month's production for the years 1923, 1924, and 1925, averaged and multiplied by 12. In June, 1926, pool voted to reduce output of each member by one-third. La Forestal acts as selling agent on 5 per cent commission. As late as 1927 there were 21 firms in the pool, controlling 90 per cent of output.

1930 Selling pool still operating. Argentine government being urged by producers to put an embargo on quebracho logs, but no action has thus far been taken.

Rubber (British Malaya)

1922 Stevenson Restriction Act, effective November 1.
1926 Higher pivotal price and new regulations.
1928 British government restriction of output without the co-operation of the Dutch announced to terminate on November 1.
1930 Active negotiations under way between British and Dutch interests looking toward joint restriction of output.

Sandalwood Oil (British India)

1916 Complete government control of the industry established through erection by the State of Mysore (India) of two sandalwood oil factories. This province and neighboring districts had possessed virtually a monopoly of the sandalwood trade, but up to that time the exports had gone out in the form of logs, mostly to Germany, to be converted into oil for use in perfumery, medicines, and soaps. Other sources of supply have been developed, notably in Western Australia, but India still possesses a monopoly of what the trade has thus far generally regarded as the best grades of oil. The two factories that were established in 1916 still produce practically all of the oil made from Indian sandalwood; though—owing perhaps to the import duty of

25 per cent placed on the oil in the United States Tariff Act of 1922—some has been produced in the United States in recent years under the supervision of agents of the Mysore government.

Silk (Japan)

1914 Japanese reelers combined, curtailed production drastically, and set minimum prices.

1915 Japanese government established the Imperial Silk Company, especially to buy large stocks of silk to carry over into the new season.

1918 Reelers combined and agreed to close their filatures until February, 1919, and to maintain a minimum price level.

1920 A pool was formed under government auspices and incorporated as the Imperial Raw Silk Company, with the financial backing of the government.

1922 An agreement curtailing production 30 per cent was made in August.

1927 Government support of a loan of 50,000,000 yen to silk growers; of a loan not to exceed 37,500,000 yen to the Imperial Silk Company to finance withdrawal of silk from the market; and of an agreement to curtail production by either closing filatures for one month or reducing output by 20 per cent during the five months from January 1 to May 31, 1928.

Sisal (Yucatan)

1912 Beginning of control of overproduction and distribution in Mexico.

1922 Legislation imposing a production tax on sisal and limiting the planting areas enacted by the State of Yucatan, Mexico.

1924 The Co-operative Society of Henequen (sisal) Planters, authorized by the federal government and representing over 70 per cent of the total production of Yucatan, began functioning in November.

1926 A Yucatan law, effective June 16, restricted the production of sisal by a sliding scale ranging from 10 per cent for small to 30 per cent for large producers.

Sugar (Cuba)

1925–26 Cuban government restricted the beginning of the grinding season to January 15.

1926–27 Beginning of grinding season advanced to January 1 and total output restricted to 4½ million long tons.

1927–28 Same regulations as in 1926–27, except that maximum output was reduced to 4 million long tons.

1928–29 All Cuban restrictions removed. In 1928, and again in 1929, representatives of the Cuban government endeavored, but without success, to conclude an international agreement with European sugar producers for the restriction of sugar production.

Sulphur (United States, Italy)

1906 Compulsory association of sulphur producers of Sicily under national law.

1910 Additional regulations for the syndicate.

1920 Maximum selling prices established by Italian Ministry of Industry, Commerce and Labor.

1923 Syndicate of American and Italian producers. The syndicate has subsequently been renewed and is still operative.

Tin (British Colonies)

1903 Differential export duty on tin ore by Federated Malay States. Tin shipped to the Straits Settlements to be smelted exempted from duty.

1904 Exemption from duty extended to include shipments to the United Kingdom.

1916 Exemption extended to Australia. Differential export duty imposed in Nigeria.

APPENDIX B

THE INCIDENCE OF AN EXPORT TAX

Just what part of a tax on a monopoly will be borne by the monopoly and what part by the consumer depends on the intelligence with which the monopoly handles its output with a view to maximum net income, and it also depends on the form in which the tax is levied. As the monopoly limits its output the price at which it can sell its restricted output increases and in theory there will always be a point where the product of the output by the price, after deducting costs of production, is maximum. In practice this point can only be found by experiment and the monopoly may produce more or less than this optimum quantity and hence fail to realize its full monopoly profit.

If, however, the law of demand, as expressed by a demand curve, were known, this point could be determined in advance with mathematical precision. In the following discussion it will be assumed that the law of demand is known and that the monopoly fixes its output at the optimum point.

The Tax, a Lump Sum

In this case the tax is borne wholly by the monopoly. It has already restricted its output to the optimum point and hence is receiving the greatest net income possible under the existing conditions of demand. When the tax is imposed the net

income, after paying the tax, will still remain the greatest possible without any change in price or output.

A Unit Tax on Output

In this case the tax will be borne in part by the monopoly and in part by the consumer. The portion borne by each will depend on the shape of the demand curve. The demonstration follows:

Assume that the demand curve is represented by $y = \phi(x)$, the unit cost by c, the output by x, the price by y, the optimum price by p, and the net income (product of price by output minus total cost) by u.

Then $u = xy - cx = x\phi(x) - cx$

$$\frac{du}{dx} = x\phi'(x) + \phi(x) - c = 0$$

It will be seen that the expression $x\phi'(x) + \phi(x) - c$ is an implicit function of c. Hence when solved for x the result will depend on the value of c. But a unit tax is virtually an addition to unit cost. Hence a unit tax will affect the optimum value of x (output) and hence determine a new optimum for p.

As an example suppose that the demand curve is a straight line, $y = -ax + b$.

Then $u = xy - cx = x(-ax + b) - cx$
$= -ax^2 + bx - cx$

$$\frac{du}{dx} = -2ax + b - c = 0$$

$$x = \frac{b - c}{2a}$$

$$y = \frac{-a(b-c)}{2a} + b = \frac{b+c}{2} = p$$

Let $t =$ the unit tax, and p' the new optimum price. Then by the same reasoning

$$p' = \frac{b+c+t}{2}$$

$$\text{Or } p' - p = \frac{t}{2}$$

That is, the price will be increased by half the tax.

An Ad Valorem Tax

Using the nomenclature of the preceding case we have (r being the ad valorem rate):

$$u = xy\ (1-r) - cx = x\phi(x)\ (1-r) - cx$$

$$\frac{du}{dx} = [x\phi'(x) + \phi(x)]\ (1-r) - c = 0$$

As before it will be seen that the expression $[x\phi'(x) + \phi(x)]\ (1-r) - c$ is an implicit function of r. The tax will therefore affect the quantity produced and hence the price. Taking, as an example, the straight line for the demand curve, we have

$$\begin{aligned} u &= xy(1-r) - cx \\ &= x(-ax + b)\ (1-r) - cx \\ &= (-ax^2 + bx)\ (1-r) - cx \end{aligned}$$

$$\frac{du}{dx} = -2ax\ (1-r) + b\ (1-r) - c = 0$$

$$x = \frac{b(1-r) - c}{2a(1-r)}$$

$$y = -a\left[\frac{b(1-r) - c}{2a(1-r)}\right] + b = p'$$

$$p' = \frac{b}{2} + \frac{c}{2(1-r)}$$

Before the tax was imposed the optimum price was

$$p = \frac{b+c}{2}$$

Hence, the increase in price,

$$(p' - p), = \frac{b}{2} + \frac{c}{2(1-r)} - \frac{b+c}{2} = \frac{cr}{2(1-r)}$$

From observation of the results of this case and of the preceding case it will be seen that (still assuming the demand curve to be represented by a straight line) an ad valorem tax can always be found that will increase the optimum price by the same amount as a given unit tax, or a unit tax can always be found that will increase the optimum price by the same amount as a given ad valorem tax. For the amount by which a unit tax increases the optimum price is $\frac{t}{2}$, and the amount by which an ad valorem tax increases the optimum price is

$$\frac{cr}{2(1-r)}$$

If we make these expressions equal we have

$$\frac{t}{2} = \frac{cr}{2(1-r)}$$

Solving for r, we have, $r = \frac{t}{c+t}$

and solving for t, we have $t = \frac{cr}{1-r}$

In the above discussion the two cases discussed last have assumed constant costs. If costs increase or decrease with output the formulae would become more complicated but it would still be found that a unit tax or an ad valorem tax would affect the monopoly price.

The foregoing analysis shows that a unit tax or an ad valorem tax will raise the optimum price, the increase depending on the shape of the demand curve. If the conditions of demand are such as to be represented by a straight line, a unit tax will raise the optimum price by half its amount.

APPENDIX C

STATISTICAL TABLES

The first three tables below show the dependence of the United States upon imports of unmanufactured and manufactured pulpwood, the changing character of our imports, and the Canadian production and export of these products. Charts based on

I. United States Consumption of Wood Pulp in All Forms, by Source of Supply, 1899-1926 [a]

(Pulpwood, pulp, and paper, all expressed in terms of pulp equivalent—in thousands of short tons)

A. All Mechanical and Chemical Wood Pulp

Year	Domestic Consumption	Domestic [b] Production	Exports	Imports		
				Total	From Canada	From Other Countries
1899.....	1,147	975	87	259	237	22
1904.....	2,062	1,549	86	599	490	109
1909.....	2,753	1,977	99	875	702	173
1914.....	3,798	2,336	120	1,582	1,184	398
1917.....	4,467	2,992	284	1,759	1,503	256
1918.....	4,270	2,816	297	1,751	1,734	17
1919.....	4,497	2,840	362	2,019	1,901	118
1920.....	5,315	3,133	241	2,423	2,103	320
1921.....	4,345	2,351	129	2,123	1,655	468
1922.....	5,847	2,823	132	3,156	2,339	817
1923.....	6,543	2,969	111	3,685	2,737	948
1925.....	7,093	3,210	129	4,012	3,049	963
1926.....	8,042	3,507	127	4,662	3,635	1,027

B. Mechanical Wood Pulp

Year	Domestic Consumption	Domestic[b] Production	Exports	Imports		
				Total	From Canada	From Other Countries
1899.....	557	505	48	100	93	7
1904.....	1,041	763	34	312	253	59
1909.....	1,287	880	44	451	438	13
1914.....	1,715	991	59	783	775	8
1917.....	2,157	1,275	97	979	954	25
1918.....	1,977	1,122	103	958	955	3
1919.....	2,176	1,208	112	1,080	1,078	2
1920.....	2,408	1,296	55	1,167	1,085	82
1921.....	2,138	1,021	23	1,140	962	178
1922.....	2,582	1,168	32	1,446	1,296	150
1923.....	2,987	1,202	31	1,816	1,564	252
1925.....	3,167	1,255	43	1,955	1,799	156
1926.....	3,636	1,335	38	2,339	2,222	117

[a] From U. S. Department of Agriculture, "American Forests and Forest Products," *Statistical Bulletin* No. 21, 1928, pp. 277 and 280. The year 1924 is not given in the original. Mechanical pulp is used almost exclusively for newsprint paper. Chemical pulp is used mostly in better grades of paper, though some is mixed with mechanical in making newsprint.

[b] The figures for domestic production refer only to pulp ground from American pulpwood. Imported pulpwood, expressed in terms of pulp, is included in the import figures.

data in tables I and II are shown on pages 227 and 228. Table IV shows the trend of coffee production in Sao Paulo, 1890-1928. A chart based on this table appears on page 164.

II. Changing Character of American Imports of Paper and Paper Materials from Canada, 1899-1926 [a]

(All figures converted to pulpwood equivalent and expressed in thousands of cords)

Year	Total from Canada	Pulpwood		Wood Pulp		Paper	
		Quantity	*Percentage of Total*	Quantity	*Percentage of Total*	Quantity	*Percentage of Total*
1899	420	369	*88*	51	*12*	—	—
1904	763	574	*75*	183	*24*	6	*1*
1909	1,025	794	*77*	204	*20*	27	*3*
1914	1,630	830	*51*	422	*26*	378	*23*
1917	2,063	774	*37*	629	*31*	660	*32*
1918	2,523	745	*29*	973	*39*	805	*32*
1919	2,741	1,032	*38*	853	*31*	856	*31*
1920	3,149	1,099	*35*	1,129	*36*	921	*29*
1921	2,378	817	*34*	681	*29*	880	*37*
1922	3,374	1,050	*31*	1,120	*33*	1,204	*36*
1923	3,859	1,236	*32*	1,178	*31*	1,445	*37*
1925	4,235	1,088	*26*	1,438	*34*	1,709	*40*
1926	4,973	1,287	*26*	1,416	*28*	2,270	*46*

[a] U. S. Department of Agriculture, "American Forests and Forest Products," *Statistical Bulletin* No. 21, 1928, p. 288. Includes Newfoundland and Labrador.

III. Canadian Production and Export of Pulpwood, Wood Pulp, and Paper, 1908-1928 [a]

Year	Pulpwood (In thousands of cords)		Wood Pulp (In thousands of short tons)		Newsprint Paper (In thousands of short tons)		All Paper (In thousands of short tons)	
	Production	Export	Production	Export	Production [b]	Export	Production	Export [c]
1908	1,325	842	363	...	...	...	...	...
1909	1,558	936	445	...	150	...	...	...
1910	1,542	943	475	...	161	...	235	...
1911	1,520	848	497	...	246	...	...	...
1912	1,847	981	683	...	256	...	...	...
1913	2,144	1,035	855	...	350	...	...	...
1914	2,197	973	935	...	415	...	...	...
1915	2,356	950	1,075	364	489	420	...	438
1916	2,833	1,068	1,296	559	608	526	...	537
1917	3,122	1,018	1,464	512	690	596	854	621
1918	3,560	1,350	1,557	584	735	637	968	674
1919	3,499	1,070	1,716	709	795	708	1,090	769
1920	4,025	1,247	1,960	820	876	762	1,215	827
1921	3,273	1,093	1,549	527	805	709	1,019	749
1922	3,924	1,011	2,150	818	1,081	960	1,367	1,007
1923	4,655	1,384	2,476	875	1,252	1,138	1,589	1,232
1924	4,647	1,330	2,465	782	1,388	1,219	1,719	1,256
1925	5,092	1,424	2,773	961	1,537	1,402	1,885	1,492
1926	5,621	1,392	3,230	1,006	1,889	1,732	2,266	1,822
1927	5,929	1,542	3,279	879	2,083	1,882	2,469	1,965
1928	...	1,532	...	864	2,381 [d]	2,207	...	2,283

[a] U. S. Department of Agriculture, "American Forests and Forest Products," *Statistical Bulletin* No. 21, p. 289. Figures since 1925 derived directly from publications of the Dominion Bureau of Statistics. Where detailed figures were not available, the fact is indicated by three dots.

[b] Reported by the Newsprint Service Bureau for the years 1909-1916.

[c] To show total paper export on a tonnage basis it was necessary to estimate the tonnage involved in hanging boards, felts, and all other paper.

[d] Obtained from Canadian Pacific Railway, *Agricultural and Industrial Progress in Canada*, March, 1929.

IV. Production of Coffee in Sao Paulo, 1890-1928 [a]

Year	Coffee Trees in Bearing	Production	
		Total (In bags of 132 pounds)	Amount per Tree (In pounds)
1890–91	200,000,000	3,357,457	2.22
1894–95	300,000,000	4,107,486	1.81
1900–01	659,960,000	8,933,500	1.79
1904–05	688,845,410	9,088,957	1.74
1909–10	696,701,425	12,124,051	2.30
1910–11	696,701,425	8,458,376	1.60
1911–12	698,701,425	10,580,173	2.00
1912–13	720,970,284	9,470,833	1.73
1913–14	722,420,748	11,072,368	2.02
1914–15	735,444,350	9,206,508	1.65
1915–16	775,111,130	11,711,200	1.99
1916–17	791,256,485	9,937,895	1.66
1917–18	834,188,763	12,210,150	1.93
1918–19	828,355,425	7,253,250	1.16
1919–20	826,644,755	4,154,700	0.66
1920–21	843,592,695	10,246,200	1.60
1921–22	871,897,400	8,197,700	1.24
1922–23	899,239,100	7,046,900	1.03
1923–24	949,149,451	10,347,355	1.44
1924–25	951,288,450	9,192,600	1.28
1925–26	966,112,590	10,087,175	1.38
1926–27	1,000,000,000 [b]	10,627,629	1.40
1927–28	1,000,000,000 [b]	17,323,019	2.29

[a] Data prior to 1924-25 from Bynum, M. L., U. S. Department of Commerce, "International Trade in Coffee," *Trade Promotion Series* No. 37, p. 17. Later figures furnished by the Department.

[b] Estimated.

APPENDIX D

DOCUMENTS

I. STATUTES OF THE ASSOCIATION OF PRODUCERS OF CHILEAN NITRATE APPROVED BY SUPREME DECREES NO. 970 OF JULY 2, 1919, AND NO. 216 OF FEBRUARY 10, 1921

(Extracts from the original, translated from the Spanish)

TITLE I. CONSTITUTION, TITLE, DURATION AND DOMICILE OF THE ASSOCIATION

ARTICLE 1. There is hereby constituted a corporation under the title of "Association of Producers of Chilean Nitrate."

ARTICLE 2. The period of duration of the Association shall be five years, which shall be understood to be extended *ipso facto* for like periods, if none of the Members composing it shall, by six months' notice in writing to the Board of Directors, express a contrary wish.

. . . . .

The Association may in no event continue if 80 per cent of the total productive power of the industry is not represented therein.

. . . . .

TITLE II. OBJECTS OF THE ASSOCIATION

ARTICLE 4. The Association is constituted for the following objects:

(a) To maintain and encourage in the present markets of consumption and in any markets which may be hereafter opened the scientific and commercial propaganda of nitrate.

(b) To keep records of the statistics of the industry in its various branches.

(c) To encourage the study and the practical application of such new methods of manufacture as may permit of the better treatment of caliche, the lessening of the cost of production, or as may in anywise be beneficial to the industry.

(d) To encourage likewise the adoption of any processes and inventions which may extend the use of nitrate.

(e) To estimate the quantity of nitrate which can be exported annually according to the conditions and needs of the market and to acquaint the Members of the Association thereof.

(f) To fix and to modify from time to time in accordance with the procedure laid down in the statutes the selling price of nitrate and to sell the same for account of the Members.

(g) To establish abroad such agencies and nitrate depots as may be expedient for the purpose of regulating the supply and consumption of the article.

. . . . .

TITLE III. MEMBERS OF THE ASSOCIATION: THEIR OBLIGATIONS

ARTICLE 5. The Members of the Association consist of all the nitrate producers, whether persons or cor-

porations, who sign this agreement and any who may subsequently adhere to the provisions thereof by means of a public notarial instrument signed by them and by the authorised representative of the Association.

. . . . .

Article 7. The Members of the Association bind themselves together with all their property to carry out the engagements and responsibilities which are imposed upon them by the present statutes, to fulfill the same in every way and to accept any modifications which may be introduced therein in accordance with the provisions of Article 77.

. . . . .

Article 9. The Members of the Association shall be bound to furnish the Board of Directors with all such information as the latter may require for the discharge of their duties and they shall allow access to the nitrate oficinas and the stores where they have deposits of nitrate and shall permit the examination of the relative books by any inspectors who may be appointed by the Board of Directors to take note of the stocks of nitrate and to verify the fulfillment of the engagements towards the Association.

Article 10. The Members of the Association shall likewise send to the Board of Directors on such dates as the latter may fix the programme of exploitation and of the work which they propose to carry out at the respective oficinas in order that the Board of Directors shall be informed of the expected developments of the industry and may have a basis upon which to adopt the resolutions referred to in Title IV of these statutes.

TITLE IV. PRODUCTIVE CAPACITY

ARTICLE 11. Within the first 15 days of June in each year the Board of Directors of the Association shall make an approximate estimate of the quantity of nitrate which may be exported in the following nitrate year, reckoning from the 1st July to the 30th June, taking into account the demand for the time being and the conditions of the market.

The Board of Directors shall communicate to the Members the conclusions at which they arrive and shall likewise communicate to them any modifications which they may think it advisable to make thereafter.

ARTICLE 12. The normal productive capacity of the various nitrate oficinas shall be fixed in agreement between the respective producer and a committee of three experts appointed by the Board of Directors, there having to be taken into account the power of the machinery, the quantity and average grade of the caliche which can be exploited and the yield from the exploitation.

The decision arrived at by the experts and the producer shall be taken as an initial basis and must be approved by the Board of Directors.

. . . . .

ARTICLE 16. The initial basis in respect of each oficina fixed in accordance with the preceding articles shall remain in force for one year, and it shall *ipso facto* continue in the following years if the producer, or the Board of Directors, as the case may be, shall not apply for a revision thereof three months at least previous to the expiration of the period.

If the producer or the Board of Directors shall so

request, a new basis shall be fixed in the manner specified for the purpose of fixing the initial basis.

Nevertheless, when from any special cause previously established to the satisfaction of the Board of Directors any Member during the course of the nitrate year considers himself entitled to an increased quota, either by the acquisition of new grounds or an increase in the productive capacity of his plant, the Board of Directors may, at the request of the interested party, proceed to revise his quota in the form prescribed in Articles 12, 13 and 14; in the same manner if an oficina diminishes its productive capacity either by the sale of its grounds, alterations in its plant, or other cause established to the satisfaction of the Board of Directors, its quota shall be revised in the form prescribed in the Statutes; and if these circumstances are of such a nature that the oficina is rendered unable to produce, its quota shall be totally forfeited. In all these cases the initial date for the increase, diminution or loss of quota shall be reckoned from the moment on which occurred the circumstances mentioned in this sub-section.

. . . . .

TITLE V. SUSPENSION OF WORK AT OFICINAS: TRANSFER OF QUOTAS

ARTICLE 19. Any producer who shall suspend for an indefinite time the manufacture of nitrate at any oficina shall be entitled to the quota corresponding to the productive capacity only until such time as the stocks appertaining to such oficina shall become exhausted.

If, subsequently, a closed oficina shall resume work, the Board of Directors of the Association shall

cause that fact to be proved by a commission as herein provided, and shall again accord the right of the producer to the relative quota.

ARTICLE 20. If the manufacture of nitrate at any oficina is suspended for the purpose of cleaning or repairing the máquina, or by reason of any other temporary cause, the right to the relative quota shall not be forfeited.

Nevertheless, where the suspension exceeds four months and the producer fails to give sufficient proof that the oficina will complete its quota in the remainder of the year, the Board of Directors may distribute the balance still to be manufactured proportionately amongst the other Members.

ARTICLE 21. When a Member has several oficinas, he may transfer from one to another a portion or the whole of the relative quotas.

Any Member of the Association may likewise sell or transfer to another Member a portion or the whole of the quota which may appertain to him.

No operation of sale or transfer may comprise quotas in respect of more than two successive years nor be renewed before the lapse of one year. During the time in which the operation continues in force, the effects of the provisions contained in Articles 19 and 20 shall be suspended. On the expiration of the period the said provisions shall be applicable unless the work at the oficinas where exploitation has been suspended shall have been resumed.

When an oficina which has transferred its quota comes within the conditions referred to in the last part of Article 16, it shall lose its right to transfer for that part of its quota which is diminished, or shall lose it altogether if it is considered to have lost

its right, counting from the date on which its quota is modified or lost.

In respect of all operations of sale or transfer of quotas notice must be previously given to the Board of Directors who shall not assent to any operations which may contravene the provisions of this article.

TITLE VI. PRICES AND SALE OF NITRATE ON THE COAST

ARTICLE 22. The Board of Directors shall fix during May or June in each year the selling prices on the coast of the various classes of Nitrate of Soda, Potassium Nitrate, or other combinations of nitrate which may be made, for immediate delivery or future deliveries.

The Board of Directors may nevertheless modify at any moment the prices previously fixed when the fluctuations of international exchange, or unforeseen changes in the price of fuel and other articles consumed in the nitrate industry, render it advisable, or when in any other way the market conditions are altered. The decision of the Board of Directors, either in fixing or modifying the prices, must be adopted at an extraordinary meeting called for that purpose in writing, with five days' notice, and a majority of 80 per cent of the Directors present shall be required. If fractions occur in the computation of the votes, the nearest whole number shall be taken.

ARTICLE 23. Any Members who are not satisfied with the prices fixed by the Board of Directors may appeal against them, requesting, for this purpose, the citing of an Extraordinary General Meeting according to sub-section 14 of Article 49.

The General Meeting may alter the decision of the

Board of Directors by a vote of 80 per cent of the Members present. Unless such majority is obtained, the decision of the Board of Directors will be considered to be approved.

Article 24. The Board of Directors may decide the sale of nitrate for immediate delivery on the Coast, or for delivery within periods not exceeding a year, with the following limitations:

Up to the whole of the monthly quota of each Member for immediate delivery, or delivery within the three following months;

Also up to 75 per cent of the said monthly quotas for delivery in the next following three months;

And finally up to 50 per cent of the said monthly quotas for delivery in the remaining six months.

When the Board of Directors thinks it convenient to effect sales for delivery more than a year ahead, the authority of an Extraordinary General Meeting must be obtained, the approval of 90 per cent of the Members being required.

Sales may be made conjointly or separately.

Article 25. The Office of Control of Sales organized in the manner set forth in Article 52 shall undertake the sale of nitrate for account and as attorney of the associated producers.

The said office may sell direct in Valparaiso, through the medium of the Nitrate Committees in London and Berlin or through such agencies as it may establish abroad.

The said office may sell nitrate for delivery at a port of discharge (viz., *c.i.f.*) paying to producers, in the usual manner, the price ruling on the coast and defraying for its own account, freight, insurance and other charges incidental to such operations.

The office may, with this object, obtain the necessary credits in the manner set forth in Article 38.

ARTICLE 26. All sales effected by the Office of Control shall be distributed amongst the Members in proportion to the normal productive capacity of the various oficinas determined in the manner specified in Article 12.

ARTICLE 27. As regards the operations to be carried out by the Office of Control of Sales, such quota as may have been assigned to each Member according to the provisions of Title IV shall not be exceeded.

Nevertheless, any balances remaining over in respect of producers whose quota shall not have been fully sold, may be sold and exported in the following year.

ARTICLE 28. In the case of any contracts of sale entered into by the Office of Control and which may not be for immediate delivery, the office shall undertake to declare to the purchaser at least 30 days in advance the Member who has to deliver the nitrate and the port or ports of shipment.

The producers shall undertake upon their own responsibility the fulfillment of the contracts and shall receive direct the price stipulated.

. . . . .

ARTICLE 29. The Office of Control shall keep, in regard to each Member, a current account in the form specified in Article 53.

The current account shall be liquidated at the end of each nitrate year, on the basis of the average of the prices which have ruled during such year, so

that all the associated producers shall receive the same price for the nitrate sold.

Nevertheless, there shall be credited to the vendors any extra price which may be paid for special classes or particular brands of nitrate or nitrate compounds.

TITLE VII. SCIENTIFIC PROPAGANDA

ARTICLE 30. The scientific propaganda shall be carried on through the medium of Delegations and in accordance with such general plan of procedure as may be laid down for each of such delegations in each nitrate year by the Board of Directors of the Association or the respective Committee.

. . . . .

TITLE VIII. COMMERCIAL PROPAGANDA: AGENCIES AND DEPOTS ABROAD: CONSIGNMENTS

ARTICLE 32. Commercial propaganda shall be carried on through the medium of the Delegations referred to in Article 30, the agencies that may have been established in accordance with Article 33 and any commercial firms whom the Board of Directors or the Committees may consider it suitable to employ for that purpose.

The Board of Directors or the Committee concerned, with the approval of the Board of Directors, shall prepare the plan of procedure to be followed in the commercial propaganda and shall allot the amounts to be laid out thereon.

ARTICLE 33. The Board of Directors of the Association by direct decision, or through the medium of the Nitrate Committees in London and Berlin, as the case may be, may establish agencies and nitrate depots abroad at such places as may be suit-

able for the purpose of meeting the market demand and in order to specially ensure the due supply of such fertiliser at the agricultural consumption centers.

ARTICLE 34. For the formation of the depots and in order to meet such expenses as may be occasioned thereby, the Members shall contribute in nitrate or in cash, according as the Board of Directors may determine, an annual non-cumulative quota not exceeding 5 per cent of such nitrate as shall have been exported for their account.

All profits or losses from such depots shall be apportioned among the Members in the manner specified in Article 53.

ARTICLE 35. The Nitrate Committee in London and the Committee in Berlin shall fix, whenever it is advisable, the selling prices in Europe in relation to such prices as may have been fixed by the Board of Directors in Chile.

The prices to be fixed by the said Committee shall rule at the agencies and depots which may be established by the Association and which may be subordinate to the Committees, according to the jurisdiction prescribed in Article 56.

The Board of Directors shall fix such prices as shall rule in countries not coming within the sphere of action of the Committees.

. . . . .

TITLE IX. STATISTICS

ARTICLE 39. The statistics shall comprise all such data as, in or out of the country, may relate to production, export, stocks, consumption, price of

nitrate, price of articles of consumption, freight and other matters connected with the nitrate industry and similar industries.

. . . . .

TITLE X. FUNDS OF THE ASSOCIATION

ARTICLE 41. The funds of the Association shall be made up of the quota to be paid by the associated producers and of any subventions which may be granted by the Government of Chile and the nitrate railway companies.

ARTICLE 42.[1] The Members of the Association shall contribute a certain quota on each quintal of nitrate shipped by them.

The Board of Directors shall annually—at the time of approving the estimates of expenses—signify the quota to be paid, they having power to fix the same between the limits of ½d. and 2d. per Spanish quintal. Nevertheless, when the circumstances require it, the Board of Directors may alter during the nitrate year the quota already fixed.

[1] At an Extraordinary General Meeting held in Valparaiso on 10th June, 1921, it was resolved to *alter Article No. 42* as follows: "The members of the Association shall contribute an annual quota, which shall not exceed one penny per Spanish quintal of nitrate, calculated on the nominal productive capacity of their Oficinas.

"The Directorate shall determine annually, at the time of approving the Budget, the quota to be recovered in the nitrate year, which shall be collected by quarterly instalments, in such proportions as may be deemed advisable having regard to requirements. When circumstances so demand, the Board may alter, during the course of the nitrate year, the quota already fixed, provided always that it be within the maximum of one penny per quintal."

TITLE XI. BOARD OF DIRECTORS OF THE ASSOCIATION

ARTICLE 43. The Association shall be administered by a Board of Directors composed of 18 Members, of whom 4 shall be those indicated in Article 46, and the remainder, who shall continue in office for one year, shall be elected at the Ordinary General Meeting in September of each year, and may be re-elected.

Only the Directors or duly authorised representatives of nitrate companies and manufacturers owning nitrate establishments in work or their lawful representatives may be elected Directors.

Any Director may be represented on the Board temporarily by any person he may nominate who shall fulfill the conditions prescribed in the preceding paragraph.

Two persons of one and the same firm or partnership may not form part of the Board of Directors.

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ARTICLE 45. In the election of the Board of Directors each Member shall have the number of votes determined by Article 66 of these Statutes, and may use them once only, distributing them amongst the Directors to be elected.

Those persons shall be declared elected who have the largest number of votes, until the number of Directors to be designated has been completed.

ARTICLE 46. There shall also be included in the Board of Directors four Fiscal Delegates named by the Government of Chile for the time which the government thinks convenient, and they need not have the qualifications called for in sub-sections 2 and 3 of Article 43.

. . . . .

ARTICLE 49. In addition to those expressly specified in these Statutes, the general duties and powers of the Board of Directors are as follows:

I. To elect from among their Members in the first ordinary session of each year, the President and Vice-President, and to name the five Members who, with the President, shall make up the Office of Control of Sales referred to in Article 52 of these Statutes. In case of equality of votes, the voting shall be repeated, and if the equality continues, it shall be decided by lot.

II. To hold two ordinary meetings per month, and extraordinary meetings whenever the Chairman shall deem it necessary or whenever five or more Members of the Board shall so request in writing.

III. To appoint and remove the Manager and Sub-Managers of the Association and such delegates and agents as may be directly dependent on the Board of Directors; to fix their powers and duties; to supervise their conduct and to designate their salaries and such gratuities as may be accorded to them.

. . . . .

V. To prescribe the general regulations and such special regulations as may be necessary for the proper ordering of the operations and work of the Association.

VI. To fix the form of sale-contracts.

VII. To establish Delegations or agencies in countries coming directly within the sphere of action of the Board of Directors, according to what is provided in Articles 55 and 56.

VIII. To promote the study of new processes of manufacture and industrial application which may tend to increase the consumption of nitrate as provided in sub-sections (*c*) and (*d*) of Article 4 of these Statutes; and to award prizes for such objects.

IX. To prepare every year the general estimates of expenses, allocating to the Nitrate Committees in London and in Berlin such sum as may be expedient for the services entrusted to them.

X. To fix the annual quota to be contributed by the Members according to the provisions of Article 42.

XI. To prescribe the form in which the statistics of the industry are to be kept.

XII. To publish a monthly Bulletin and to inform the Members of the progress of the industry every three months by means of a report which shall be inserted in the said Bulletin.

. . . . .

XIV. To call an Ordinary General Meeting, as mentioned in Article 62, and to call an Extraordinary General Meeting when it thinks proper, or when it may be asked for in writing by five or more Members, or a smaller number representing at least 15 per cent of the productive power of the Association, in accordance with Article 66.

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TITLE XII. OFFICE OF CONTROL OF SALES

ARTICLE 52. The Office of Control of Sales shall be composed of the President of the Association and five Directors named specially by the Board of Directors on its being constituted each year.

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ARTICLE 54. At the request and for account of any Members so desiring, the Office of Control of Sales may undertake, in consideration of a remuneration to be fixed by the Board of Directors, the purchase of coal, petroleum and any articles of consumption which may be advantageously acquired in that manner. Furthermore, it may undertake the contracting of insurance and freight and generally any business of common interest for the Members.

All these operations shall be effected without any responsibility attaching to the Association.

TITLE XIII. COMMITTEES IN LONDON AND BERLIN

ARTICLE 55. The Association shall be represented out of this country by the Chilean Nitrate Committee in London and the Chilean Nitrate Committee in

Berlin with the powers conferred on them by these Statutes.

The Board of Directors of the Association shall nevertheless exercise immediate direction of and supervision over the operations and propaganda work in Central America and South America.

ARTICLE 56. The Board of Directors shall define the sphere of action of the London and Berlin Committees in countries in which propaganda is at present carried on.

Whenever the operations of the Association extend to other countries, the Board of Directors may either undertake such operations direct or nominate the Committee which is to deal with the same.

ARTICLE 57. The London Committee shall be composed of eight Members, and the Berlin Committee of six Members, who must be nitrate manufacturers or their lawful representatives, or directors of nitrate companies.

Two delegates of the Government of Chile shall also form part of each Committee if the Government think fit to appoint them.

Four of the eight Members of the London Committee and three of the six Members of the Berlin Committee shall be elected at those cities by the producers domiciled in England or Germany, respectively, and the remaining Members shall be elected in Chile by the General Meeting of Members. Such last-mentioned election shall take place at the Ordinary General Meeting in September of each year, and the election in London and Berlin shall be held after the result of the first-mentioned election is known.

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ARTICLE 60. The general duties and powers of the London and Berlin Committees are as follows:

. . . . .

II. To assemble in ordinary meeting at least once a fortnight, and in extraordinary meeting whenever the Chairman may deem it necessary, or three or more Members of the Committee shall so request in writing.

. . . . .

IV. To direct the work of scientific propaganda, to prepare the estimates of expenses in connection therewith, and to submit the same for the approval of the Board of Directors; to appoint and remove the higher *personnel* of the Delegations; to approve the programmes of work, and to give instructions for the development thereof.

V. To organise the operations of commercial propaganda and to fix the expenditure to be devoted to that object within the total sum assigned to the Committee.

. . . . .

VII. To establish new Delegations or agencies in the countries coming within their jurisdiction according to the provisions of Article 56.

. . . . .

TITLE XIV. GENERAL MEETINGS

ARTICLE 62. The Members shall assemble in Ordinary General Meeting in the month of September each year.

. . . . .

ARTICLE 64. An Ordinary General Meeting shall be constituted by such number of Members as shall be present at the time fixed for the meeting. An Extraordinary General Meeting requires for the validity of its proceedings the attendance of persons representing not less than 50 per cent of the votes of the Members. If that number be not present, the

meeting shall again be called for such date as may be fixed by the Board of Directors, and the meeting shall then be held whatever be the number of Members present on the second occasion.

. . . . .

ARTICLE 66. Resolutions of General Meetings shall be passed by an absolute majority of votes, unless the Statutes require a larger majority.

Each Member shall possess on his own behalf one vote, and further, in proportion to the quota allotted in conformity with the provisions of Title IV, one vote for every 1,000 quintals of nitrate constituting that quota.

Whenever in these Statutes a particular majority is requisite or reference is made to the attendance, the number of votes or the productive power of the Members, the rule laid down in the preceding paragraph shall be applicable.

. . . . .

TITLE XV. GENERAL PROVISIONS

ARTICLE 70. Any Members who export, sell, consign, transfer or in any manner negotiate nitrate of their production otherwise than through the Association, shall incur a fine of ten shillings for each Spanish quintal of nitrate forming the subject of the infringement.

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ARTICLE 75. The Association may not go into liquidation at any times other than the times mentioned in Article 2 without a resolution of 90 per cent of the Members.

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ARTICLE 77. For the purpose of resolving on any amendment of the Statutes, a number of votes representing at least 90 per cent of the Members is requisite.

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II. FRANCO-GERMAN POTASH ACCORD SIGNED AT PARIS DECEMBER 29, 1926

(Translated from the French)

Between the *Deutsches Kalisyndikat Gesellschaft mit beschrankter Haftung,* of Berlin, hereafter named "the Syndicate" party of the first part, and

a) the *Société commerciale des Potasses d'Alsace,* situated in Paris and Mulhouse; and

b) Les Mines Domaniales de Potasse d'Alsace at Mulhouse; and

c) the *Société Anonyme des Mines de Kali Sainte-Therese,* Mulhouse; hereafter named "the Société" (la Société), party of the second part, the following agreement has been concluded following the Lugano agreement of April 10, 1926:

ARTICLE I.

To the Syndicate is reserved exclusive rights to sell in Germany, as well as in possible German colonies, protectorates and mandates.

To the Société is reserved exclusive rights to sell in France, in French colonies, protectorates and mandates.

The two parties agree to take all necessary measures to prevent any exportations or re-exportations

from these territories by a third party without special authorization.

In the case where the reserved territories are used as countries of transit, the final destination of the goods will be placed under a rigorous supervision. The measures taken for this control will be communicated to the other party.

The exclusive sales rights apply to the following potash salts:

1) Ores containing potash, which are produced in the mines, crude salts, in solid or dissolved form;

2) Chloride of potash, sulphate of potash, sulphate of potash-magnesia, the different potash salts used as fertilizers, and all potash products, which, as a general rule, are produced directly from crude potash salts, as well as the residues of these products containing potash;

(3) Mixtures of crude and refined salts; that is to say, mixed salts.

Beginning May 1, 1927, all exports of potash from the mines, in whatever form they may be, will be subject to the conditions of the present contract of the two parties, and reckoned in terms of K_2O. This will hold true also for compound fertilizers (containing potash) produced by present processes or those which may develop in the future.

The two parties shall come to an agreement, as soon as possible, with regard to the prices and conditions to be established for potash used in the manufacture of different preparations for export, outside of territories reserved to both parties, as well as the form and method of control to be adopted for this purpose.

The exclusive sales rights conceded to France and Germany in the territories under their control, carry

with them for each party, the prohibition to make deliveries of potash salts for export, in no matter what form, into the territory of the other party.

No derogation of this last clause can be effected, save under exceptional circumstances, and for special chemical products in which the potash content is of a secondary part.

Nevertheless, in the calculation of the amount of each party's participation, the deliveries made for this manufacture will be included in the quota accounting, as has been previously arranged.

ARTICLE II.

The adhesion to the present contract by the French owners of the potash mines, that is, the owners of the Mines Domaniales de Potasse d'Alsace and the Mines de Kali Sainte-Therese, conjointly with the Société Commerciale des Potasses d'Alsace, has for an object the guarantee that in the case of the cessation of the Société Commerciale des Potasses d'Alsace, these owners shall remain bound in their own names by this contract for its whole duration.

In the same manner, all the owners of the German mines are equally bound personally as members of the Kalisyndikat.

In Germany, all of the potash mines or plants are obliged to adhere to the Syndicate from the beginning of their production.

In France, the owners of the mines adhering to the Société agree to try to bring about the adhesion to the Société of all new exploiters of potash mines or plants, just as the German mines form part of the Syndicate.

In case of the creation, in the countries reserved

to the two parties, of new potash mines or of new plants for the transformation of potash originating from the mines, their exports shall be included in the respective foreign sales quotas of the Syndicate and the Company.

The signatories of the contract obligate themselves to take all necessary measures which will effect the reporting and control of the quantities of potash salts and manufactured products originating from the mines, which may be exported by new producers not adherent to the present contract.

ARTICLE III.

The two parties will jointly take the necessary measures for maintaining the regularity of the market.

ARTICLE IV.

As from May 1, 1926, the annual sale, outside of Germany, of France, their colonies, mandates and protectorates, will be divided until an annual sale of 840,000 metric tons of K_2O is reached, in such manner that the Syndicate will receive 70 per cent and the Société 30 per cent.

For any tonnage over an annual sale of 840,000 tons, the Syndicate will receive 50 per cent and the Société 50 per cent. It is, however, agreed that when the sale of 825,000 metric tons K_2O shall have been attained, the Société shall receive 3,000 metric tons of K_2O by right of priority, above its fixed quota.

If, in the fourth year of the contract, an annual sale of 840,000 tons of K_2O has not been reached, the Société shall receive for the fifth year of the contract a priority for the delivery of 8,000 tons of K_2O,

without the 3,000 tons of K_2O, provided for in case the tonnage of 825,000 tons of K_2O should have been attained.

Should the sale of 840,000 tons of K_2O not be attained during the course of the fifth year, it is agreed that, in any case, from the beginning of the sixth year, the quantities over the highest annual tonnage reached during the first five years shall be divided in the proportion of fifty-fifty.

ARTICLE V.

The two parties have agreed to select, as rapidly as possible, for each country, joint organizations for the development of sales.

ARTICLE VI.

The two parties shall mutually communicate within the three days following each of the ten-day periods of each month the amount of the orders received and of deliveries made—either by rail or by water—within each ten-day period.

In case one of the parties exceeds its quota of orders in a country, at the end of one of these ten-day periods a readjustment shall be made, except by contrary agreement, immediately, if possible, or at most not later than two months, by the transfer of a corresponding number of orders to the other party.

In every case, an exact readjustment of the participating quotas must be reached before the end of the season, which is also that of the contract year, (April 30 of each year).

Only in the case where an exact compensation cannot be effected, due to forces beyond control, a

readjustment of the quotas shall be made, either by a complementary delivery to be made within a maximum delay of four months, or by payment by the party in excess to the party in deficit, of a bonus of 15 per cent of the gross sales price obtained in the country under discussion.

ARTICLE VII.

The selling price for each country shall be fixed by a common agreement between the directing boards of the two parties on the basis of the proposals presented by the managing boards of the sales organizations, which should take into account the actual conditions prevailing in each country at the time.

These prices shall be established, on the one hand, by taking into consideration cost prices, and, on the other hand, in such a manner as to allow the development of the use of potash for agriculture and industry in each country.

ARTICLE VIII.

The collaboration of the Syndicate and of the Société has as its aim the development of the sale of potash according to the needs of the various countries, the realization of economies in general expenses, and the avoidance of a useless increase in prices for the consumer. The division provided for in Article IV above, does not in any way prevent the two parties from coming to an agreement, through a special accord, to effect changes from one country to another, if measures of this sort appear to them advisable from a practical point of view.

ARTICLE IX.

A commission of control shall be constituted, composed of members half of whom shall be chosen by each of the two parties.

The members of this commission, who may act, either in common co-operation, or separately, shall examine the exactness of the declarations made by the two parties throughout the duration of the present contract, either at the head offices of the companies, or at the mines, in the offices or in any other place.

If certain findings of the commission are not recognized by one of the parties, this latter has the right to demand a new investigation by two persons chosen outside of the commission, and who, in case of disagreement between themselves, shall have the right to designate a board of arbitration, each of the contracting parties having one of the two members of this board.

The members of the commission of control as well as the persons designated to proceed with a new investigation shall have the right to demand the assistance in their functions, by representatives of the contracting parties.

ARTICLE X.

The terms of the present contract replace the previous agreements.

The two parties declare that they desire to conform to this contract in a spirit of loyal and friendly co-operation.

ARTICLE XI.

The present contract shall be written in German and in French and the two texts shall be signed by the two parties.

ARTICLE XII.

In case of differences which might arise either directly of indirectly from the execution of the present contract, no recourse may be made to the jurisdiction of any ordinary tribunals.

These differences shall be settled by arbitration.

Arbitration shall be entrusted to an Arbitration Committee which shall be composed of two representatives of each party. These four arbitrators shall name a supreme arbitrator and, in the case where they cannot come to an agreement on the choice of this arbitrator, the President of the Arbitration Court of The Hague shall be asked to designate him.

In case of an infraction duly established, the guilty party shall be called upon to pay a fine to the other party, the amount of which shall at the maximum be five times the value of the litigation; and, in the case of a second offense within the same year ten times the value of the litigation for which the arbitration has been demanded.

ARTICLE XIII.

This contract is made for a duration of ten years dating from May 1, 1926, with the provision that it may be cancelled at the end of the seventh year, provided a notice of cancellation of one year has been given in advance.

If this contract is not cancelled, it shall remain in operation until the tenth year, and if it is not denounced one year before the tenth year, it shall be prolonged by tacit renewal by five-year periods, if a notice of cancellation has not been given one year before the expiration of these periods.

If this contract terminates through denunciation

or non-renewal, the compensation between amounts delivered and the quotas agreed upon shall be made in currency as stated in Article VI.

[Signed by the authorized representatives of the parties to the accord listed in the introductory paragraph.]

III. REPORT OF THE STEVENSON COMMITTEE ON THE RUBBER SITUATION IN THE BRITISH DEPENDENCIES, MAY 19 AND OCTOBER 2, 1922

(The Stevenson Committee was appointed by the Secretary of State for the Colonies to investigate the rubber situation in the British colonies and protectorates. Its members were: Sir James Stevenson, Bart., G. C. M. G., *Chairman,* Sir Stanley Bois, Sir Edward Brockman, K. C. M. G., Mr. E. J. Byrne, Mr. Wm. Duncan, Sir Gilbert Grindle, K. C. M. G., C. B., Mr. H. Eric Miller, Sir Edward Rosling, Mr. S. H. Leake, O. B. E., *Secretary.)*

A. REPORT

MR. CHURCHILL,

The Committee's terms of reference were:

"To investigate and report upon the present Rubber situation in British Colonies and Protectorates for the information of the Secretary of State for the Colonies, and to advise what remedial measures should be taken to improve the existing position."

. . . . . .

2. The Committee have had many suggestions and much information before them, including the Reports of the Duncan Committee submitted to the

Government of the Straits Settlements and Federated Malay States on January 26, 1921, and the Report, dated October 1st, 1921, of the Commissions appointed by His Excellency the Governor of the Straits Settlements and High Commissioner of the Federated Malay States to enquire into and report on:

(a) The present state of trade depression brought about in the main by the continued depression in the Rubber Industry: and

(b) the extension of credit facilities.

3. The Committee devoted their attention in the first place to ascertaining the present state of the Rubber Industry. In the absence of complete official statistical information, the Committee carefully investigated the relevant statistics from such official and unofficial sources as were available, and have concluded that the following figures of Plantation and Wild Rubber may be taken as showing approximately the present position:

Production.—The actual production of Crude Rubber in 1920 and 1921 was:

Year	Plantation Tons	Wild Tons	Total Tons
1920	335,000	35,000	370,000
1921	260,000	22,000	282,000

The normal unrestricted output of Plantation Rubber during 1922 is estimated at 380,000 tons, whilst the production of Wild Rubber is estimated at 20,000 tons, or 400,000 tons in all.

Consumption.—The average annual world absorption during the years 1919-21 was 300,000 tons, viz.:

1919	330,000 tons
1920	310,000 "
1921	265,000 "

In the present state of world trade, it is not possible to estimate the consumption of Crude Rubber in 1922 at more than the foregoing average, viz.: 300,000 tons, but some authorities place the probable consumption as low as 260,000 tons.

Stocks.—The total world stocks of Crude Rubber on January 1st, 1922, are estimated at:

In consuming countries.....	210,000 tons
In producing countries.....	60,000 "
Afloat	40,000 "
	310,000 "

This estimate of the total amount of Crude Rubber in existence includes the invisible stocks in the hands of both producers and manufacturers. Necessary stocks of Crude Rubber may be estimated at the equivalent of eight months' consumption, which on the foregoing estimate for 1922 would call for 200,000 tons. On this basis the surplus stocks at January 1st, 1922, amounted to 110,000 tons.

4. From these figures it appears that, in order to reduce the production of Plantation Rubber to the level of probable consumption during 1922, a restriction to at least 75 per cent of normal production would be required. The Committee were of the opinion, however, that the depression in the Industry could not be sufficiently rapidly relieved unless a substantial inroad were made into the existing surplus stocks during 1922, and that a more drastic restriction is imperative to ensure this.

5. Of these figures, the Committee cannot fail to advise you to contemplate with grave concern the position of the Industry in British Colonies and Protectorates, unless steps are taken to reduce stocks and further, to prevent over-production of rubber so

long as the potential normal production continues to be substantially in excess of consumption. They are of opinion that consumption is not likely to overtake potential production for some years.

6. The Committee next directed their attention to the manner in which the existing surplus could be reduced and future supplies so regulated with a view to establishing an equilibrium between supply and demand and stabilising the Industry on a sound footing. They have examined this problem from four points of view:

(a) Stimulation of new and extended uses of rubber.

(b) Voluntary restriction.

(c) The laissez-faire argument.

(d) Government action.

7. With regard to (a), there is no doubt that much can be done in the direction of stimulating new and extended uses of rubber, but this cannot, in itself, provide an immediate solution of the problem, since much time must necessarily elapse before any new and extended uses of rubber can become sufficiently operative to bring about materially increased consumption. Further, it should be realised that improved methods of manufacturing rubber products, such as tyres, undoubtedly prolong the life of the article and consequently curtail the demand for raw rubber.

8. With regard to (b), the Rubber Growers' Association which represents about 37 per cent of the plantation rubber-producing interests, secured the adhesion of nearly all their members to a voluntary restriction of output to 75 per cent of normal during the period November 1st, 1920, to December 31st,

1921. During December last, they endeavoured to secure the assent of their members to continue voluntary restriction by undertaking not to produce more rubber during the first six months of 1922 than they produced during the corresponding period of 1921, or alternatively, than 75 per cent of their output during the corresponding period of 1920. The Council of the Association was able to secure the assent of only 55 per cent of the producing interests represented by members of the Association, as compared with the minimum of 70 per cent deemed necessary to make the scheme operative. Notwithstanding this, it is evident that the necessity for continuing to restrict output is appreciated by a large proportion of the members of the Association, who will, no doubt, continue this policy on an independent voluntary basis.

9. With regard to (c), the advocates of the *laissez-faire* policy desire to see a survival of the fittest. They rely on being themselves amongst the survivors, and disregard entirely the hardships which must fall on the many tens of thousands of shareholders in this country alone, and the many thousands of European and Asiatic owners and shareholders resident in the countries of production, if the Industry is to drift along unprofitably until the weakest have been eliminated. It must be borne in mind that even though a proportion of existing proprietors are forced to abandon their estates, the rubber trees thereon will remain a potential source of rubber and will be brought into production again by some one as soon as a margin of profit can be secured. The Committee could not, therefore, advise you to leave things in their present unsatis-

factory state, unless all efforts to find a positive solution of the problem fail.

10. With regard to (d), the Committee are fully aware of the grave objections to Government interference with industry, especially when it takes the form of restricting the output of an important raw material. These objections are obvious to all and need not be set out in detail. It was only with reluctance and with a lively apprehension of the dangers which threaten both the Industry and the countries in which it is so largely carried on that the Committee agreed to consider a measure of compulsory restriction as an alternative to what seemed to be worse evils.

11. Further, the Committee desire to put on record that at the outset of their inquiry, they formed and have never departed from, the conviction that it was impossible to deal with the problem as one affecting only the British Colonies and Dependencies in which rubber is produced. They recognised from the first that no scheme of restriction, whether voluntary or compulsory, could usefully be applied in Malaya unless it was simultaneously applied in other countries in which there is production of rubber on a large scale. This conviction formed the basis of the Committee's deliberations, and, in particular, they have throughout kept in view the fact that no scheme, however excellent in itself, could properly be recommended to you for adoption unless it commended itself to the Authorities of the Dutch East Indies, who control the only important source of Plantation Rubber outside British Colonies and Dependencies.

As indicating the relative importance of different

plantation rubber-producing countries, the following approximate percentages are given:

	Percentage of Total Production
Malaya	57.5
Ceylon	12.5
South India and Burma	2.0
Netherlands East Indies	25.5
Other Countries	2.5
	100.0

12. The Committee had numerous schemes before them involving Government action, but as several had fundamental objections it is not proposed to refer to them all in this Report. Two schemes, however, appeared to offer a practicable solution of the problem, and are briefly described below:

Scheme (I) is that suggested by the Duncan Committee in their Report of January, 1921, and involves legislation prohibiting both the production and export of any quantity of rubber in excess of a prescribed percentage of that produced or exported during a specified previous period.

Scheme (II) was proposed by the Chairman, and comprises a graduated scale of export duties varying with the percentage of standard production (i. e. output during a specified previous period) exported; a low duty being fixed on the amount exported within a permissible percentage and prohibitive duties being fixed if more than the permissible standard production be exported.

The outlines of these two schemes are as follows:

Scheme (I):—

(a) Adopts, as the standard production, the actual output of each producer during the twelve

months, November, 1919, to October, 1920, estimated to aggregate 330,000 tons of Plantation Rubber from all producing countries;

(b) restricts to a percentage of the standard production, leaving a margin of production available to meet forward contracts or cases of special hardship; such percentage being fixed from time to time by notification in the Government Gazette;

(c) sets out draft enactment and rules to carry the scheme into effect.

Scheme (II)—"Standard Production" would be the same as in Scheme (I), and the following scale of duties is proposed:

Percentage of Standard Production exported	Subject to duty per lb. over all	
Per Cent	s.	d.
Over 100	1	2
91 to 100	1	0
81 to 90	0	10
76 to 80	0	8
71 to 75	0	6
66 to 70	0	4
61 to 65	0	2
60 and under	0	1

Of these rates of duty, 1d. per lb., irrespective of the price of rubber or quantity exported, would be imposed permanently in lieu of the existing *ad valorem* duty, but rates in excess of 1d. would be temporarily imposed, say for three years. When the rubber situation improved so as to justify an increased percentage of standard production being exported, the necessary elasticity would be secured by fixing the minimum rate of 1d. just below the increased percentage required; thus, if export of 70 per cent instead of 60 per cent could be absorbed,

the duty on export of 70 per cent and under would be fixed at 1d. duty on 71 per cent and over remaining as in the scale.

13. It will be seen that the essential differences between the two schemes are that the first prohibits output over a fixed percentage and secures no revenue to the State, whilst the second would have a tendency to restrict exports over a fixed percentage, but not directly production, would bring in a revenue to the State from duty, and should not prove difficult to administer.

14. The Committee regarded Scheme (II) as the preferable of the two and easily workable. If adopted, the percentage of standard production to be allowed during the twelve months following the introduction of the scheme should be fixed at 60 per cent, which, with the margin to meet forward contracts or cases of special hardship by reason of the period selected for the standard, would ensure a substantial diminution of the surplus stock of Crude Rubber. Alterations in the percentage of standard production should be governed by the price of standard quality Smoked Sheet in the London market, and it was proposed that when the price for such rubber had been maintained at not less than 1s. 3d. per lb., London landed terms during the whole of three consecutive months, the percentage of production which may be exported at the minimum duty should be raised automatically by 5 for the next ensuing quarter. At the end of every quarter a similar adjustment, either upwards or downwards, in the permissible percentage exported at the minimum rate of duty would automatically take place, but the percentage would not fall below 60 per cent.

In arriving at this formula the Committee had most prominently in view the desirability of taking no steps which would be liable to prejudice the legitimate development and expansion of the uses of rubber. A policy of restriction can only be a temporary palliative, but, in fixing the price which shall govern the alterations in the percentage of standard production exported at the minimum rate of duty, the Committee arrived at what they believed to be a figure which would ensure a satisfactory margin of profit, notwithstanding the somewhat higher cost of a restricted crop. At the same time, the manufacturers of rubber goods should be able to obtain their supplies of crude rubber at a reasonable price with much less risk of the violent fluctuations which have been such a drawback in the past, and should thus have every encouragement to develop new uses for rubber, many of which have already been suggested and are only awaiting practical exploitation on a substantial scale.

15. The minimum rate of Export Duty allowed in the scale is approximately twice the amount now payable in Ceylon and in the Federated Malay States at the price indicated, and the Committee contemplated that increase only because the working of the scheme may involve some additional expense on the part of Government in administering it. They are of opinion that a substantial proportion of any additional revenue obtained under the scheme should be specifically set aside and applied for the direct benefit of the Plantation Rubber Industry in such ways as Scientific Research, and the development of new uses for rubber.

16. Having reached a tentative agreement to submit to two schemes, the Committee, being convinced that it was essential that any policy of restriction, if it is to be effective and not to injure one producing country to the advantage of others, must be applied simultaneously in all the chief producing countries, viz.: Malaya, Netherlands East Indies and Ceylon, considered it advisable that steps should be taken to have their schemes submitted to the proper authorities in those countries.

17. The Chairman accordingly reported the position to you towards the end of November and obtained your authority to approach the Netherlands Government, with a view to ascertaining whether they would be prepared to co-operate in the adoption of one or other of these two schemes.

18. Until the attitude of the Dutch is definitely known, the Committee are unable to carry their inquiry further, as they cannot recommend the adoption of either of the proposed schemes by only one or more British Colony or Protectorate.

In view of the present disparity between probable demand and potential production, and the large surplus stocks which exist, the immediate outlook of the Rubber Industry is a serious one, but the Committee desire to record their unanimous conviction that stabilisation on a sound basis can be secured by friendly co-operation amongst the principal producing countries. So strongly do the Committee believe this to be the case that they consider the Governments concerned would be well advised actively to encourage such co-operation, and they trust that you may consider it worth while, in the light of this report, to cause further representations to be made to the Dutch Government on the subject, with a

view to holding an International Conference in London of the principal interests concerned.

J. STEVENSON (Chairman).
STANLEY BOIS.
E. L. BROCKMAN.
E. J. BYRNE.
WM. DUNCAN.
G. GRINDLE.
H. ERIC MILLER (subject to rider re para. 15).
EDWARD ROSLING.

S. H. LEAKE,
Secretary.

May 19th, 1922.

Rider.—With reference to paragraph 15 of this Report, I am unable to agree that Government would be justified in retaining any portion of the additional revenue accruing under the scheme after defraying the cost of administering it. I am of opinion that all such surplus revenue should be specifically applied for the benefit of the Industry.—H. Eric Miller.

B. SUPPLEMENTARY REPORT OF THE RUBBER COMMITTEE

The Committee concluded their report of June, 1922,[2] by stating that they were unable to carry their inquiry further until the attitude of the Dutch was definitely known, as they did not feel justified at that time in recommending the adoption by one or more British Colony or Protectorate of either of the proposed schemes for Government intervention in the rubber industry.

Since that report was issued, the reply of the Netherlands Government to the proposals for co-operation with His Majesty's Government in

[2] Cmd. 1678.

legislating to ameliorate the situation in the industry has been received.

The Netherlands Government has decided not to take at present any legislative measures to restrict the production of rubber in the Netherlands.

. . . . . .

2. The Committee have considered the question of whether in these circumstances a policy of restrictive measures in British Colonies and Protectorates alone could be adopted to the advantage of the British rubber industry, and in this consideration they have been influenced by the following facts:

(a) Excessive and increasing production of rubber owing to the failure of the producers to make voluntary restriction effective with the consequent continuation of the depression in the price of rubber.

(b) The general demand by the leaders of the rubber industry both in London and in Malaya for restrictive measures if necessary by one or more of the British Dependencies independently of the Netherlands Government attitude.

(c) The Committee have had before them the latest available estimates as to the figures of the world's production and absorption of rubber in 1922, together with figures of existing stocks.

Notwithstanding the fact that the rate of the world's absorption of rubber for the present year shows a substantial increase on the Committee's previous figure of 300,000 tons, they have decided to base their recommendations on the figure of absorption mentioned in their previous report, in order that they may err on the safe side.

. . . . .

4. The Committee have closely investigated the effects of the introduction in British Colonies and

Protectorates of legislation framed to bring about more stable conditions in the industry even without Government control over production in other territories.

5. Inquiries have been made as to the possibility of securing voluntary restriction of tapping on British estates situated in such other territories in association with any restrictive measures that might be taken in the territories of the British Empire; the Committee understand that the Rubber Growers' Association have obtained the assurance of co-operation in this sense from the majority of these estates. This support will proportionately reduce the restriction in British Territories necessary to effect a readjustment of supply to demand.

6. In view of these new considerations and the predominating interest in the rubber industry held by British producers, the Committee have felt a revision of their previous attitude to be justified, and they accordingly desire to recommend that a scheme of Government intervention should be put into operation in Ceylon, the Malay States and the Straits Settlements as soon as possible.

The scheme which they recommend is practically that of Scheme 2 in their previous report, with certain amendments.

Recommendations

(1) The scheme recommended adopts as the standard production the actual output of each producer during the twelve months—1st November, 1919, to 31st October, 1920—amplified in accordance with the suggested Rules contained in Appendix "A."

(2) In lieu of existing Export Duties, a minimum export duty is to be levied on that percentage of standard production which is allowed to be exported under this scheme at the minimum rate of duty. The Committee recommend that this minimum be fixed at the lowest possible rate not to exceed 1d. per pound.

If a producer desires to export a quantity greater than that allowed to be exported at the minimum rate of duty, he shall pay an export duty on his total export during that period of twelve months on the following scale:

	Duty per pound over all	
	s.	d.
Not exceeding 65 per cent of standard production	0	4
Over 65 per cent but not exceeding 70 per cent	0	5
" 70 " " " 75 "	0	6
" 75 " " " 80 "	0	7
" 80 " " " 85 "	0	8
" 85 " " " 90 "	0	9
" 90 " " " 95 "	0	10
" 95 " " " 100 "	0	11
" 100 "	1	0

At the initiation of the scheme the percentage exportable at the minimum rate is to be 60.

When the rubber situation improves so as to justify allowing an increased percentage of standard production to be exported at the minimum rate of duty the minimum would be substituted in its appropriate place in the scale.

(3) Alterations in the percentage of standard production would be governed by the price of standard quality smoked sheet in the London market, and it is proposed that, when the average price for such rubber during three consecutive months has

been maintained at not less than 1s. 3d. per pound London landed terms, the percentage of production which may be exported at the minimum duty would be raised automatically by 5 for the next ensuing quarter. In the event of such average price being maintained at not less than 1s. 6d. per pound, London landed terms, during the whole of three consecutive months, the percentage of production which may be exported at the minimum duty would be raised automatically by 10 for the next ensuing quarter.

(4) Furthermore, in order that the operation of the scheme may secure the desired result, even though for reasons at present unforeseen 60 per cent of standard production should prove to be too high, the Committee recommend that if during the second quarter after the initiation of the scheme or in any subsequent period of three consecutive months, the price of rubber, as hereinbefore defined, has not averaged at least 1s. per pound, the percentage of standard production that may be exported at the minimum duty shall be reduced to 55, and if that reduction is not effective in raising the average price over the following three months to 1s. 3d. then it shall be reduced to 50 at the end of the three months, and so on by reductions of 5 per cent at the end of each three months until that average price is secured.

Once the percentage has been lowered it would not be increased except on the basis of a price of 1s. 3d. as aforementioned. If during any quarter when the percentage of standard production that may be exported at the minimum duty is for the time being fixed at not under 65 per cent and the

price during that quarter has not averaged at least 1s. 3d. per pound, the percentage for the ensuing quarter would be reduced by 5.

(5) The application of the scheme in their several territories would rest with the local Governments concerned.

(6) The Committee recommend that an Advisory Committee be appointed in London for the purposes of co-ordinating the operation of the scheme in Ceylon, Malaya, and such other territories as may be involved. They suggest that this Committee should consist of official and non-official members, whose duty would be to advise the Secretary of State on all matters referred to it in connection with the operation of the policy now recommended, and that it should be charged with the responsibility of advising him as to the alterations in the rate of minimum duty required under the scheme.

(7) The Committee recommend that the Governments of the territories concerned should set up Committees on which there should be representatives of the industry to deal with cases for special consideration in regard to local application of the scheme, and the Committee annex to this Report rules that would require to be observed by these local Committees in the administration of the scheme.

The Committee cannot conclude this Report without observing that, apart from the financial relief that may be expected to accrue to all rubber producers from the scheme, the discouragement it affords to more drastic tapping, cannot but benefit the estates of those managements who are voluntarily or compulsorily associated with the scheme

and leave them ultimately in a stronger position than the estates whose trees have been subjected to tapping on an excessive scale.

J. Stevenson
Stanley Bois
E. L. Brockman
E. J. Byrne
Wm. Duncan
G. Grindle
H. Eric Miller
Edward Rosling

G. E. J. Gent,
Secretary.
October 2nd, 1922.

Appendix A

Rules for the Guidance of Committees

In issuing certificates of standard production—

1. "Standard production" shall be the quantity of dry rubber produced from any holding during the period from 1st November, 1919, to 31st October, 1920, provided that if the owner of any holding is unable to declare the output from his holding during that period in the absence of proper records, or if he proves to the satisfaction of the Committee that the output from his holding during that period was abnormal for any of the causes referred to in these rules, the Committee shall certify some other quantity as the standard production for such holding, in accordance with the rules as set out hereunder.

2. If any owner is unable to declare the quantity of rubber produced from his holding during such period, the Committee shall assess the amount to be deemed to be the standard production for that holding, but the quantities so assessed shall not exceed the quantity attained by multiplying the number of acres planted with rubber of each age by the output

per acre allotted for trees of each age in accordance with the following table:

	Maximum Output for 12 Months
Under five years	Nil
Between five and six years	120 pounds
Between six and seven years	180 "
Between seven and eight years	240 "
Eight years and over	320 "

3. If any owner claims that a portion of his holding is planted with trees which were not tapped prior to 1st November, 1920, he shall be allowed as standard production in addition to his output from 1st November, 1919, to 31st October, 1920, an amount calculated according to the table in Rule 2 above.

4. If any owner claims that during the period 1st November, 1919, to 31st October, 1920, his output was less than his normal output owing to—

(a) Lack of labour;

(b) Abnormal ill-health of his labour forces;

(c) Disease of his trees, from which they have since recovered;

(d) Resting of the trees; or

(e) Any other reasonable cause;

such addition shall be made to his actual output from 1st November, 1919, to 31st October, 1920, for purposes of certification as would, in the opinion of the Committee, equal the loss of output sustained thereby, but in no such case shall the total output for the holding exceed the quantity to which he would have been entitled if he had applied under Rule 2 hereof.

5. If any owner can prove to the satisfaction of the Committee that prior to the commencement of the enactment he has entered into bona fide forward

contracts for the sale and delivery of a quantity of rubber in excess of the amount of his normal "standard production" as arrived at under these Rules, diminished by the percentage of restriction for the time being in force, and that either—

(a) Such contract specifies that the rubber to be delivered under the contract is rubber from his holding only; or

(b) He is unable to contract on the market to buy in the excess contracted for over the quantity he would be allowed to produce at a price not greater than the price at which he has sold, the Committee may allow him as standard production such quantity as when diminished by the percentage of restriction for the time being in force would allow him to produce a sufficient quantity to cover his contracts, provided that certificates issued under this Rule may be revised by the Committee at any time when such contracts expire or the percentage of restriction for the time being in force is altered.

6. Certificates of "standard production" when issued may not be varied within twelve months of the date of such issue, but on the expiration of such period of twelve months or any subsequent period of twelve months any owner may apply for revision of the quantity for which his holding has been assessed on the grounds that further areas have since the issue of the certificate attained the age of five years and are in a condition to tap. In such case the Committee shall increase the quantity assessed in accordance with the Rules laid down herein.

7. If any owner states on his application form that he desires to be assessed to any quantity other than his actual output from the period of 1st Novem-

ber, 1919, to 31st October, 1920, and gives his reasons for this request, the Committee shall, before issuing any certificate, notify such owner of the quantity at which the Committee propose to assess him, and inform him that in the event of his objecting to such assessment he must state his case personally or by his representative or by letter at a specified time and place.

IV. INTERNATIONAL CONVENTION FOR THE ABOLITION OF IMPORT AND EXPORT PROHIBITIONS AND RESTRICTIONS, NOVEMBER 8, 1927 [3]

A. Text of Main Convention

. . . . .

Having regard to the resolution of the Assembly of the League of Nations dated September 25th, 1924;

Being guided by the conclusions of the International Economic Conference held at Geneva in May 1927, and agreeing with the latter that import and export prohibitions, and the arbitrary practices and disguised discriminations to which they give rise,

[3] The text below includes the convention proper, including a separate annex to article 6; the protocol to the convention; certain supplementary declarations of the Conference; and the protocol concerning the entry into force of the convention proper. It does not include, except for article A, the supplementary agreement and the protocol thereto. For the complete texts of the convention and supplementary agreements see *Questions Économiques et Financières*, 1927, II, 71, and *ibid.*, 1928, II, 36, both League of Nations documents.

have had deplorable results, without the grave drawbacks of these measures being counterbalanced by the financial advantages or social benefits which were anticipated by the countries which had recourse to them;

Being persuaded that it is important for the recovery and future development of world trade that Governments should abandon a policy which is equally injurious to their own and to the general interest;

Being convinced that a return to the effective liberty of international commerce is one of the primary conditions of world prosperity; and

Considering that this object may best be achieved by resort to simultaneous and concerted action in the form of an international convention;

Have appointed their plenipotentiaries, namely:

. . . . .

(List of Plenipotentiaries)

who, having communicated their full powers, found in good and due form, have agreed to the following provisions:

Article 1.

The provisions of the present Convention shall apply to prohibitions and restrictions imposed on the importation into the territories of any High Contracting Party of goods the produce or manufacture of the territories of any other High Contracting Party, and to prohibitions and restrictions imposed on the exportation of goods from the territories of any High Contracting Party to the territories of any other High Contracting Party.

Article 2.

Subject to the exceptions provided for in the following articles, the High Contracting Parties undertake to abolish within a period of six months from the date of the coming into force of the present Convention, in so far as the respective territories of each of them are concerned, all import and export prohibitions or restrictions, and not thereafter to impose any such prohibitions or restrictions. During this period each of the High Contracting Parties will adopt all appropriate measures in order to reduce existing prohibitions and restrictions to a minimum and will refrain from imposing any new prohibitions or restrictions.

Further, the High Contracting Parties undertake to adopt the necessary measures to ensure that the provisions of the present Convention are strictly observed by all authorities, central or local, and that no regulation is issued in contravention thereof.

Article 3.

Should the High Contracting Parties, in pursuance of their legislation, subject the importation or exportation of goods to certain regulations in respect of the manner, form or place of importation or exportation, or the imposition of marks, or to other formalities or conditions, they undertake that such regulations shall not be made a means of disguised prohibition or arbitrary restriction.

Article 4.

The following classes of prohibitions and restrictions are not prohibited by the present Convention, on condition, however, that they are not applied in such a manner as to constitute a means of arbitrary

discrimination between foreign countries where the same conditions prevail, or a disguised restriction on international trade:

1. Prohibitions or restrictions relating to public security.

2. Prohibitions or restrictions imposed on moral or humanitarian grounds.

3. Prohibitions or restrictions regarding traffic in arms, ammunition and implements of war, or, in exceptional circumstances, all other military supplies.

4. Prohibitions or restrictions imposed for the protection of public health or for the protection of animals or plants against disease, insects and harmful parasites.

5. Export prohibitions or restrictions issued for the protection of national treasures of artistic, historic or archaeological value.

6. Prohibitions or restrictions applicable to gold, silver, coins, currency notes, banknotes or securities.

7. Prohibitions or restrictions designed to extend to foreign products the régime established within the country in respect of the production of, trade in, and transport and consumption of native products of the same kind.

8. Prohibitions or restrictions applied to products which, as regards production or trade, are or may in future be subject within the country to State monopoly or to monopolies exercised under State control.

Article 5.

Nothing in this Convention shall affect the right of any High Contracting Party to adopt measures prohibiting or restricting importation or exportation for the purpose of protecting, in extraordinary

and abnormal circumstances, the vital interests of the country.

Should measures of this character be adopted, they shall be applied in such a manner as not to lead to any arbitrary discrimination against any other High Contracting Party. Their duration shall be restricted to that of the causes or circumstances from which they arise.

Article 6.

1. The High Contracting Parties, recognising that there exist in the case of certain of them situations of fact or of law which prevent the latter from immediately undertaking, as regards certain specified products, the engagements entered into under the previous articles, have deemed it equitable to authorise these High Contracting Parties to make a reservation in regard to certain temporary exceptions, which the latter undertake to withdraw as soon as the circumstances from which they arise cease to exist.

2. Moreover, the High Contracting Parties, recognising that the abolition of certain import or export prohibitions or restrictions applied by some of them would involve the latter in grave difficulties, and that, moreover, these prohibitions or restrictions do not prejudicially affect the trade of other countries, have also deemed it equitable to authorise these High Contracting Parties to make a reservation in regard to these exceptions.

3. The Annex to the present Convention sets forth the exceptions coming within the provisions of the two preceding paragraphs, which have been agreed to on this day's date in favour of the High Contracting Parties who are mentioned by name in

the Annex and who have signed the Convention on that date.

4. Exceptions which the High Contracting Parties may desire to claim subsequently to that date shall be dealt with in accordance with the procedure laid down in the Protocol to the present Convention.

Article 7.

Should one of the High Contracting Parties be obliged to adopt any measure of prohibition or restriction against products of any foreign country, whether the Convention be applicable to that country or not, he shall frame the measure in such a way as to cause the least possible injury to the trade of the other High Contracting Parties.

Article 8.

If a dispute arises between two or more High Contracting Parties as to the interpretation or application of the provisions of the present Convention—with the exception of Articles 4, 5 and 6, and of the provisions of the Protocol relating to these articles—and if such dispute cannot be settled either directly between the parties or by the employment of any other means of reaching agreement, the parties to the dispute may, provided they all so agree, before resorting to any arbitral or judicial procedure, submit the dispute with a view to an amicable settlement to such technical body as the Council of the League of Nations or the parties concerned may appoint. This body will give an advisory opinion after hearing the parties and, if necessary, effecting a meeting between them.

The advisory opinion given by the said body will not be binding upon the parties to the dispute unless it is accepted by all of them, and the parties, if they

all so agree, may either after resort to such procedure, or in lieu thereof, have recourse to any arbitral or judicial procedure which they may select, including reference to the Permanent Court of International Justice as regards any matters which are within the competence of that Court under its Statute.

If a dispute of a legal nature arises as to the interpretation or application of the provisions of the present Convention—with the exception of Articles 4, 5 and 6, and of the provisions of the Protocol relating to these articles—the parties shall, at the request of any of them, refer the matter to the decision of the Permanent Court of International Justice or of an arbitral tribunal selected by them, whether or not there has previously been recourse to the procedure laid down in the first paragraph.

In the event of any difference of opinion as to whether a dispute is of a legal nature or not, the question shall be referred for decision to the Permanent Court of International Justice or to the arbitral tribunal selected by the parties.

The procedure before the body referred to in the first paragraph above or the opinion given by it will in no case involve the suspension of the measures to which the dispute refers; the same will apply in the event of proceedings being taken before the Permanent Court of International Justice—unless the Court decides otherwise under Article 41 of its Statute—or before the arbitral tribunal selected by the parties.

Nothing in the present Convention shall be construed as prejudicing the rights and obligations derived by the High Contracting Parties from the engagements into which they have entered with ref-

erence to the jurisdiction of the Permanent Court of International Justice, or from any bilateral conciliation or arbitration conventions between them.

Article 9.

Any High Contracting Party may, either upon ratifying the present Convention or thereafter, declare that he undertakes, in regard to any other High Contracting Party accepting the same obligation, to extend the application of the provisions of paragraph 3 of Article 8 to any dispute which may arise in connection with the interpretation or application of the provisions of the present Convention, including all or part of Articles 4, 5 and 6, and whether or not the dispute is of a legal nature.

Any High Contracting Parties who do not give the undertaking referred to in paragraph 1 as regards Articles 4, 5, and 6, or certain parts of these Articles, and as regards the provisions of the Protocol relating thereto, may make the provisions of paragraphs 1 and 2 of Article 8 applicable to these matters as between themselves.

Article 10.

Any High Contracting Party may at the time of signature, ratification or accession declare that, in accepting the present Convention, he does not assume any obligations in respect of all or any of his colonies, protectorates or territories under suzerainty or mandate; and the present Convention shall not apply to any territories named in such declaration.

Any High Contracting Party may give notice to the Secretary-General of the League of Nations at any time subsequently that he desires that the Convention shall apply to all or any of his territories

which have been made the subject of a declaration under the preceding paragraph, and the Convention shall apply to all the territories named in such notice ninety days after its receipt by the Secretary-General of the League of Nations.

Any High Contracting Party may at any time declare that he desires that the present Convention shall cease to apply to all or any of his colonies, protectorates or territories under suzerainty or mandate, and the Convention shall cease to apply to the territories named in such declaration one year after its receipt by the Secretary-General of the League of Nations.

Article 11.

Nothing in the present Convention shall prejudice the rights and obligations which the High Contracting Parties may derive from international Conventions in force to which they are parties.

The present Convention shall not prejudice the provisions of any bilateral agreements in force at the present date between the High Contracting Parties which establish, in regard to import and export prohibitions or restrictions, a more liberal régime than that established by the provisions of the present Convention.

Article 12.

The present Convention shall not in any way affect rights and obligations arising from the Covenant of the League of Nations.

Article 13.

The High Contracting Parties shall, within twelve months after the coming into force of the present Convention in their territories, communicate to one

another through the Secretary-General of the League of Nations a report on the steps taken to give effect to the provisions of the Convention.

Article 14.

The present Convention, of which the French and English texts are both authentic, shall bear this day's date.

It shall be open for signature until January 1st, 1929, on behalf of any Member of the League of Nations or of any non-Member State represented at the Conference which drew up this Convention or to which the Council of the League of Nations shall, for this purpose, have communicated a copy of the present Convention.

Members of the League of Nations and non-Member States on whose behalf the Convention has been signed prior to February 1st, 1928, may avail themselves of the procedure referred to in Article 6, paragraph 4.

Article 15.

The present Convention shall be ratified.

The instruments of ratification shall be deposited with the Secretary-General of the League of Nations, who shall notify the receipt thereof to all Members of the League and to the non-Member States referred to in the previous article.

Article 16.

On and after January 1st, 1929, any Member of the League of Nations or any State referred to in Article 14 may accede to the present Convention.

This accession shall be effected by a notification made to the Secretary-General of the League of Nations, to be deposited in the archives of the

Secretariat. The Secretary-General shall at once notify such deposit to all who have signed or acceded to the Convention.

Article 17.

The present Convention shall come into force under the conditions and on the date to be determined at the meeting provided for hereinafter.

Between June 15th and July 15th, 1928, the Secretary-General of the League of Nations shall invite the duly accredited representatives of the Members of the League of Nations and of non-Member States on whose behalf the Convention shall have been signed on or before June 15th, 1928, to attend a meeting at which they shall determine:

(*a*) The reservations which, having been communicated to the High Contracting Parties in accordance with Article 6, paragraph 4, may, with their consent, be made at the time of ratification;

(*b*) The conditions required for the coming into force of the Convention and, in particular, the number and, if necessary, the names of the Members of the League and of non-Member States, whether they are signatories or not, whose ratification or accession must first be secured;

(*c*) The last date on which the ratifications may be deposited and the date on which the Convention shall come into force if the conditions required under the preceding paragraph are fulfilled.

If, on the expiration of this period, the ratifications upon which the coming into force of the Convention will be conditional have not been secured, the Secretary-General of the League of Nations shall consult the Members of the League of Nations and non-Member States on whose behalf the Con-

vention has been ratified and ascertain whether they desire nevertheless to bring it into force.

Article 18.

The present Convention may be denounced by a notification in writing addressed to the Secretary-General of the League of Nations on behalf of any Member of the League of Nations or of any non-Member State after the expiration of a period of five years reckoned from the date on which the Convention shall have entered into force.

Such denunciation shall take effect twelve months after the date on which it is received by the Secretary-General of the League of Nations, and shall operate only in respect of the Member of the League of Nations or the non-Member State on whose behalf it is made.

Nevertheless, the Convention may be denounced on behalf of any Member of the League of Nations or any non-Member State after the expiration of the third year from the date of the present Convention, if, after that period, any one of the exceptions allowed in virtue of Article 6, paragraph 1, still exists. This denunciation shall take effect six months after the date on which it is received by the Secretary-General, and shall operate only in respect of the Member of the League of Nations or the non-Member State on whose behalf it is made.

Furthermore, the Convention may be denounced on behalf of any Member of the League of Nations or of any non-Member State after the expiration of the fifth year from the date of the present Convention, if, after that period, such Member of the League of Nations or non-Member State considers that any one of the exceptions allowed by the High

Contracting Parties at the meeting provided for in Article 17 has impaired the effects of the present Convention.

This denunciation shall take effect six months after the date on which it is received by the Secretary-General, and shall operate only in respect of the Member of the League of Nations or the non-Member State on whose behalf it is made.

Any denunciation made in accordance with the foregoing provisions shall be notified immediately by the Secretary-General of the League of Nations to all the other High Contracting Parties.

If, as a result of denunciations, the conditions for the coming into force of the Convention which the High Contracting Parties may lay down at the meeting provided for in Article 17 should no longer be fulfilled, any High Contracting Party may request the Secretary-General of the League of Nations to summon a Conference to consider the situation created thereby. Failing agreement to maintain the Convention, each of the High Contracting Parties shall be discharged from his obligations from the date on which the denunciation which led to the summoning of this Conference shall take effect.

Article 19.

If, before the expiration of the period of five years mentioned in paragraph 1 of Article 18, notifications should be addressed to the Secretary-General of the League of Nations on behalf of one-third of the Members of the League of Nations and of non-Member States to which the present Convention applies, informing him that they desire the Convention to be revised, all the Members of the League of

Nations and all non-Member States to which the Convention applies agree to take part in any consultation which may be held for this purpose.

If the revision has taken place before the end of the fifth year from the date of the coming into force of the present Convention, any Member of the League of Nations or non-Member State who has not accepted the revised Convention shall have the right to denounce the present Convention, without regard to the period of five years provided for in paragraph 4 of Article 18. Such denunciation shall take effect on the date on which the revised Convention comes into force.

If the revision has taken place in the course of the fifth year from the date of the coming into force of the present Convention, the period of denunciation referred to in paragraph 1 of Article 18 will be prolonged by one year.

B. Annex to Article 6

In accordance with Article 6, paragraph 3, and with Section IV (*d*) of the Protocol, each of the exceptions maintained in favour of the countries mentioned below is only admitted under the terms of the present Convention if the country concerned appends its signature [1] thereto on this day's date, and if, on that same date, the prohibition or restriction which it seeks to maintain is still in force.

[1] Among the countries referred to in this Annex, the following signed the Convention on November 8th, 1927: Germany, Austria, Belgium, Great Britain, etc., Egypt, France, Hungary, Italy, Japan, Luxemburg, Roumania and Czechoslovakia.

I.

Exceptions agreed to under Paragraph 1

Germany: Coal, coke, peat, lignite, briquettes (import and export); scrap iron and scrap of other metals and alloys (export); *Austria:* Scrap iron and scrap of other metals and alloys (export); *Belgium:* Scrap iron and scrap of other metals and alloys (export); *Great Britain:* Synthetic organic dyestuffs and colours or colouring matter containing them, as well as organic intermediate products used in the manufacture of such dyestuffs, colours and colouring matter (import); *France:* Scrap iron and scrap of other metals and alloys (export); *Hungary:* Scrap iron and scrap of other metals and alloys (export); *Italy:* Scrap iron and scrap of other metals and alloys (export); *Japan:* Synthetic organic dyestuffs and colours or colouring matter containing them, as well as organic intermediate products used in the manufacture of such dyestuffs, colours and colouring matter (import); rice (import and export); *Luxemburg:* Scrap iron and scrap of other metals and alloys (export); *Roumania:* Scrap iron and scrap of other metals (export); used machinery for industrial installations (import); *Czechoslovakia:* Coal, coke, peat, lignite, briquettes (import and export); scrap iron and scrap of other metals and alloys (export).[5]

[5] Article A of the Supplementary Agreement of July 11, 1928, to the Convention of November 8, 1927, for the Abolition of Import and Export Prohibitions and Restrictions includes the following additions to paragraph 1 of this Annex to Article 6:

Bulgaria: Rose trees and roots and shoots (export); *Chile:* Scrap iron and scrap zinc (export); mares (export); *Czechoslovakia:* Hop shoots (export); *Portugal:* Fine wool (export); cork in the raw state (export); *Sweden:* Scrap iron (export).

II.

Exceptions agreed to under Paragraph 2

Egypt: Live-stock (exportation subject to license) (export); eggs, during certain months of the year (export); organic fertilisers, including pigeon-manure, slaughter-house offal and dried blood (export); *United States of America:* Helium gas (export); *Italy:* Iron ores (export); corn (export); *Roumania:* Ores of iron, copper and manganese (export); crude oil (export).[6]

IN FAITH WHEREOF the delegates have signed the present Convention.

DONE at Geneva, the eighth day of November, one thousand nine hundred and twenty-seven, in a single copy, which shall be deposited in the archives of the Secretariat of the League of Nations, and of which authenticated copies shall be delivered to all Members of the League of Nations and non-Member States represented at the Conference.

. . . . .

[Signatory countries: Up to January 1, 1930, the Convention and Supplementary Agreement had been signed or acceded to ad referendum on behalf of the following countries: United States of America; Austria; Belgium; Bulgaria; Chile; Czechoslovakia; Denmark; Egypt; Estonia; Fin-

[6] Article A of the Supplementary Agreement of July 11, 1928, to the Convention of November 8, 1927, for the Abolition of Import and Export Prohibitions and Restrictions includes the following additions to paragraph 2 of this Annex to Article 6:

Czechoslovakia: Quartzite (export); *Estonia:* Platinum, precious stones, pearls and corals (in a rough state or finished, loose or mounted) (export); *Portugal:* Pine resin (export); *United States of America:* Helium gas (export).

land; France; Germany; Great Britain and Northern Ireland and those Parts of the British Empire which are not separate Members of the League of Nations; Hungary; India; Italy; Japan; Latvia; Luxemburg; Netherlands; Norway; Poland; Portugal; Roumania; Kingdom of the Serbs, Croats and Slovenes; Siam; Sweden; Switzerland; Turkey.

Ratifications: Most, but not all, of the countries signing the Convention had ratified conditionally or unconditionally by September 30, 1929—the date set for putting the Convention into effect. But a sufficient number of unconditional ratifications being lacking, and certain other conditions specified in the Convention not having been met, by that date, the Convention did not go into effect until a special protocol putting it into provisional effect as of January 1, 1930, was signed on December 20, 1929. A copy of this special protocol is included below, pp. 447-50.]

C. Protocol to the Convention

At the moment of signing the Convention of to-day's date for the Abolition of Import and Export Prohibitions and Restrictions, the undersigned, duly authorised, have agreed on the following provisions, which are intended to ensure the application of the Convention:

SECTION I.

ad Article 1.

(*a*) The words "territories of the High Contracting Parties" employed in the Convention refer only to territories to which it is made applicable.

(*b*) Should the Customs territory of any High Contracting Party include territories which are not

placed under his sovereignty, these territories are also to be regarded as "territories" within the meaning of the Convention.

(*c*) In view of the fact that within or immediately adjacent to the territory of India there are areas or enclaves, small in extent and population in comparison with such territory, and that these areas or enclaves form detached portions or settlements of other parent States, and that it is impracticable for administrative reasons to apply to them the provisions of the Convention, it is agreed that these provisions shall not apply to them.

India, however, will apply as regards the areas or enclaves in question a régime which will respect the principles of the Convention and facilitate imports and exports as far as practicable, and will refrain from imposing in regard to them any new measures of prohibition or restriction which would not be authorized by the provisions of the Convention, unless there should be no other means of ensuring the collection of customs and excise duties.

SECTION II.

AD ARTICLE 2.

As regards the application of Article 2, the obligation accepted by Canada binds only the Federal Government and not the Provincial Governments, which, under the Constitution, possess the power of prohibiting or restricting the importation and exportation of certain products into or from their territories.

SECTION III.

AD ARTICLE 4.

(a) ad No. 4.

The protection of animals and plants against disease also refers to measures taken to preserve them

from degeneration or extinction and to measures taken against harmful seeds, plants, parasites and animals.

(b) ad No. 7.

The High Contracting Parties, although they have refrained from making any reference to measures relating to "standard" products and definitions of products, declare that this paragraph must be interpreted as in no way interfering with the practice followed by certain countries of subjecting the exportation of their products to certain conditions as to quality with the object of preserving the reputation of those products and at the same time of offering a guarantee to the foreign purchaser. They declare, on the other hand, that they interpret the paragraph in question as prohibiting recourse to any system of classifying or defining products which is employed as an indirect means of restricting the importation of foreign products or of subjecting importation to a régime of unfair discrimination.

(c) ad No. 7.

The High Contracting Parties declare that prohibitions or restrictions the sole object of which is either to prevent imported goods from escaping the payment of the customs duties applicable thereto, or in exceptional cases to prevent the importation of certain goods which would reduce the revenue from the duties imposed on certain other goods, may only be established or maintained, if no other effective means exist of securing the said revenue.

(d) ad No. 7.

The High Contracting Parties declare that if, on account of the constitution of certain States and the different methods of internal control which they

employ, it should prove impossible to secure complete similarity of treatment between native and imported products, any such difference in treatment must not have the object or effect of establishing an unfair discrimination against the latter.

(e) ad No. 8.

The High Contracting Parties declare that they have solely in view monopolies each of which applies only to one or more specific articles.

SECTION IV.

AD ARTICLE 6.

(a) ad No. 1.

The High Contracting Parties who have made the reservations referred to in paragraph 1 of Article 6 declare that they do not regard their acceptance of the provisions of Article 18, paragraph 3, as an undertaking on their part that the circumstances which compelled them to make these reservations will have ceased to exist at the end of three years, but as entitling any High Contracting Party to resume his freedom of action if, in the event of these circumstances not having changed within the said period, he considered that his economic conditions were detrimentally affected by the maintenance of any of the prohibitions or restrictions to which the aforesaid reservations refer.

(b) ad No. 2.

By allowing the exceptions referred to in Article 6, paragraph 2, the High Contracting Parties have not intended to give perpetual recognition to their existence, but merely to indicate that the necessity of abolishing these exceptions is not so imperative, in view of their slight importance in international trade.

(c) ad No. 2.

The High Contracting Parties declare that, by accepting in the case of Roumania, in consideration of her exceptional situation of fact and of law, the reservation concerning crude oil in accordance with Article 6, paragraph 2, they have not in any way agreed to measures of prohibition or restriction for this product, which they regard as being of very great importance for the world market. The High Contracting Parties feel confident that, as soon as circumstances allow her to do so, Roumania herself, acting in the spirit of the preceding paragraph (b) above, will abolish this prohibition, and, in the meantime, that she will take into account the interests of the neighboring contracting countries.

The Roumanian Delegation fully associates itself with this declaration.

(d) ad No. 4.

(i) *Scope of the Provision.*

As regards paragraph 4, it is understood that any claims for exceptions which may be put forward after the date of the present Convention shall refer only to prohibitions or restrictions in force on that same date.

(ii) *Procedure.*

1. Any High Contracting Party may make known by a communication addressed to the Secretary-General of the League of Nations any prohibitions or restrictions which he desires to be able to maintain in virtue of paragraphs 1 and 2 of Article 6. Such communications must reach the Secretary-General before February 1st, 1928. It shall state the conditions, if any, on which the High Contract-

ing Party in question would be prepared to abandon such prohibitions or restrictions.

2. As soon as possible after February 1st, 1928, the Secretary-General of the League of Nations shall notify the High Contracting Parties of all applications which he has received under the preceding paragraph.

3. Any High Contracting Party wishing to make observations on any applications so communicated may forward such observations to the Secretary-General of the League of Nations not later than May 1st, 1928. As soon as possible after that date, the Secretary-General will inform the High Contracting Parties of all observations received.

4. Any applications and observations made by the High Contracting Parties shall be examined at the meeting provided for in Article 17 of the Convention.

SECTION V.

AD ARTICLE 7.

The expression "trade of the High Contracting Parties" signifies the trade of their territories to which the Convention applies.

SECTION VI.

Prohibitions or restrictions applying to prison made goods are not within the scope of the Convention.

SECTION VII.

Should any prohibitions or restrictions be imposed within the limits laid down by the Convention, the High Contracting Parties shall strictly adhere to the following provisions as regards licenses:

(*a*) The conditions to be fulfilled and the formali-

ties to be observed in order to obtain licenses shall be brought immediately in the clearest and most definite form to the notice of the public;

(*b*) The method of issue of the certificates of licenses shall be as simple and stable as possible;

(*c*) The examination of applications and the issue of licenses to the applicants shall be carried out with the least possible delay;

(*d*) The system of issuing licenses shall be such as to prevent the traffic in licenses. With this object, licenses, when issued to individuals, shall state the name of the holder and shall not be capable of being used by any other person.

As regards the allocation of quotas, the High Contracting Parties, without pronouncing upon the method to be adopted, consider that an equitable allocation of such quotas is one of the essential conditions for the equitable treatment of international trade.

IN FAITH WHEREOF the Plenipotentiaries have signed the present Protocol.

DONE at Geneva the eighth day of November, one thousand nine hundred and twenty-seven, in a single copy, which shall be deposited in the archives of the Secretariat of the League of Nations, and of which authenticated copies shall be delivered to all Members of the League of Nations and non-Member States represented at the Conference.

[Signatory countries: United States of America; Austria; Belgium; Bulgaria; Chile; Czechoslovakia; Denmark; Egypt; Estonia; Finland; France; Germany; Great Britain and Northern Ireland and those Parts of the British Empire which are not

separate Members of the League of Nations; Hungary; India; Italy; Japan; Latvia; Luxemburg; Netherlands; Norway; Poland; Portugal; Roumania; Kingdom of the Serbs, Croats and Slovenes; Siam; Sweden; Switzerland; Turkey.]

D. Supplementary Declarations [7]

The Conference also made the following declarations:

1. The Conference,

Approving the resolutions of the International Economic Conference held at Geneva in May, 1927, relative to measures for the prevention of diseases of plants and animals by means of international agreements;

Considering that certain of these agreements, in particular the Berne Convention of 1881 against phylloxera, have led to successful joint action with favourable results;

Considering that measures against epizooties and epiphyties should have in view only the protection of animals and plants or of the public health endangered by the consumption of harmful meat or plants, and should in no case be imposed or enforced as a means of hampering or discriminating against the trade of countries exporting products of the stockbreeding industry or agriculture; and

Considering that it is desirable to adopt only measures of proved efficacy and to make their

[7] These Supplementary Declarations were incorporated in the Final Act of the International Convention for the Abolition of Import and Export Prohibitions and Restrictions, also dated November 8, 1927.

severity proportionate to the risks of infection anticipated:

Recommends the Council of the League of Nations to undertake with as little delay as possible and in the manner which appears to it most expedient, the necessary investigations, consultations and enquiries with a view to summoning a conference or conferences of experts, with special knowledge of all questions relating to the prevention of diseases of animals and plants, which should be invited to propose to the various Governments joint action that would be effective against the evils that all these Governments desire to combat, and at the same time would have due regard to the sovereign rights of States and the interests of international trade.

The Conference is aware that efforts have been made by certain countries to arrive at the desired results by means of bilateral agreements; it recommends that the bodies to which the Council entrusts the investigations described above should examine the provisions of such agreements and observe their effects.

2. With reference to paragraph 6 of Article 4 the Conference declares that it approves the resolutions of the International Economic Conference held at Geneva in May, 1927, relating to necessary freedom to procure foreign exchange for payment for imported goods.

3. In order to prevent the submission of any reservation under Article 6 of the Convention in the case of certain prohibitions, concerning in particular skins, hides and bones, which are at present in force in a large number of countries, the Conference recommends:

(a) That the countries in which these prohibi-

tions are applied should immediately confer together with a view to ascertaining whether they could not simultaneously renounce all reservations in this connection;

(b) That, if this result cannot be attained, preparatory work should be undertaken in order that the question may be settled in the most satisfactory manner at the meeting provided for in Article 17.

4. The Conference recommends that the meeting provided for in Article 17 of the Convention should take into account not only the commercial importance of the countries in question but also their geographical distribution, and the possible necessity of the simultaneous participation of certain of their number.

5. The Conference declares that the Convention affects neither the tariff systems nor the treaty-making methods of the participating countries, nor the measures taken to ensure the application thereof, but it expresses the firm conviction that the abolition of prohibitions and restrictions should not warrant the establishment of excessive export or import duties or hindrances of any other kind which would replace those that it is the aim of the Convention to remove.

It declares that a return to freedom of trade in the case of a particular product entails on producing and consuming countries correlative obligations, which should take the form of an equitable régime in regard both to export and import duties, especially in cases where the latter are applicable to articles manufactured from the raw material for which free exportation is to be re-established under the Convention.

E. Protocol Concerning the Entry into Force of the Convention for the Abolition of Import and Export Prohibitions and Restrictions, December 20, 1929

The undersigned, being duly authorized and met at Paris at the invitation of the Secretary-General of the League of Nations, in conformity with the provisions of Article 17 of the International Convention for the Abolition of Import and Export Prohibitions and Restrictions signed at Geneva on November 8th, 1927, and of Articles C and D of the Supplementary Agreement to the said Convention signed at Geneva on July 11th, 1928;

Having noted that the instruments of ratification were deposited by their respective Governments within the time-limit provided for in the aforesaid Article C of the Supplementary Agreement, except in the case of Germany on behalf of whom this deposit was not effected until November 23rd, 1929, and except in the case of Norway who has not yet carried out this formality.

Taking note of the annexed declaration made by the delegate of Norway;

Noting that certain of the conditions for the entry into force of the Convention and of the Supplementary Agreement mentioned above as defined in Article 17 of the Convention have not been fulfilled;

Noting furthermore that it is not possible at the moment to fulfill these conditions;

Being anxious nevertheless that the above-mentioned Convention and Supplementary Agreement should be put into force between the countries they represent, and hoping that the said conditions will be realized in the near future;

Have agreed to the following provisions:

(1) The German Government's ratification shall be regarded, exceptionally, as having the same effect as if it had been deposited before September 30th, 1929.

(2) The forthcoming ratification announced by the Norwegian Government shall be regarded, exceptionally, as having the same effect as if it had been deposited before September 30th, 1929.

(3) If ratifications on behalf of Czechoslovakia and Poland are deposited before May 31st, 1930, they shall be regarded, exceptionally, as having the same effect as if they had been deposited before September 30th, 1929.

(4) The Convention shall be put into force on January 1st, 1930, by the countries on whose behalf the present Protocol is signed.

In the case of Hungary, the Convention will be put into force in the manner stated in the annexed declaration by the Hungarian delegate.

(5) Those of the countries referred to above which have made the putting into force of the Convention conditional on its ratification by Czechoslovakia and Poland or either of these countries, shall not be bound by its provisions after July 1st, 1930, unless both or either of these countries, as the case may be, ratifies the Convention before May 31st, 1930, and complies with the obligations arising out of the putting into force of the Convention on January 1st, 1930. Similarly, a country which made the putting into force of the Convention conditional, as far as it is concerned, upon its ratification for any country or countries other than Czechoslovakia or Poland shall not be bound by its provisions after

July 1st, 1930, unless such other country or countries are themselves bound after that date.

If any countries waive the benefits of the provisions of the preceding sub-paragraph they shall inform the Secretary-General of the League of Nations of this fact by a declaration addressed to him before June 20th, 1930.

(6) Any of the countries referred to in paragraph 4 shall be relieved of the obligations accepted by it in virtue of the present Protocol on the 30th June 1931, or the same date in 1932, 1933 or 1934 on forwarding a declaration to that effect on any of these dates to the Secretary-General of the League of Nations. This possibility, however, will cease if and when the number of countries for which, before the signature of the present Protocol, the Convention has been ratified without its entry into force being made subject to conditions or with its entry into force being made subject to conditions which are fulfilled, is not less than eighteen.

It is understood that when a country maintains the Convention in force under the provisions of the second sub-paragraph of No. 5 of this Protocol in spite of the fact that its conditions have not been fulfilled, those conditions shall not thereby be considered to have been fulfilled for the purpose of the application of the second sentence of the preceding sub-paragraph.

The provisions of the preceding two sub-paragraphs shall apply to Czechoslovakia and Poland in the event of the Convention being ratified on their behalf within the period mentioned in Paragraph 5.

(7) The provisions contained in Paragraph 6 above shall be extended to any Member of the

League of Nations or any non-Member State acceding to the Convention after this day's date.

In faith whereof the undersigned have signed the present Protocol.

Done at Paris, on December twentieth, one thousand nine hundred and twenty-nine, in a single copy the French and English texts of which are both authoritative and which shall be deposited in the archives of the Secretariat of the League of Nations.

Certified true copies shall be transmitted to all the Members of the League of Nations and to any non-Member States to which the Council of the League of Nations shall have communicated a copy of the Convention of November 8th, 1927.

[Signatory countries: Germany; Austria; Belgium; Great Britain;[9] Denmark; United States of America; France; Hungary;[10] Italy;[11] Japan;[12] Luxemburg; Norway;[13] the Netherlands; Portugal; Roumania; Switzerland; and Yugoslavia.]

[9] "I declare that my signature does not include any of His Britannic Majesty's Colonies, Protectorates or Territories under suzerainty or mandate." [Signed] S. J. Chapman.

[10] "The undersigned, duly authorized by the Hungarian Government:—

"Considering that the special circumstances of Hungarian law prevent him from subscribing to Paragraphs 4 and 5 of the above Protocol:

"Declares, while accepting the other provisions of the said Protocol, that his Government will, as far as it is concerned, consider the Convention to have been put into force by Hungary on January 1st, 1930, on condition, however:

"(1) that Germany, Austria, Italy, Rumania, Switzerland and Yugoslavia should be bound by the provisions of the Convention after July 1st, 1930;

"(2) that Poland and Czechoslovakia should have ratified the Convention before May 31st, 1930, and that they comply

V. INTERNATIONAL AGREEMENT RELATING TO THE EXPORTATION OF HIDES AND SKINS, JULY 11, 1928

A. Text of Main Agreement

Article 1.

The High Contracting Parties undertake that, on and after October 1st, 1929, the exportation of raw or prepared hides and skins shall not be subject to any prohibition or restriction under whatever form or denomination.

Article 2.

The High Contracting Parties undertake that, as from the same date, there shall neither be maintained nor imposed on the products referred to in Article 1 any export duty or any charge—apart from a statistical duty—which, under the respective laws of the High Contracting Parties, is not applicable to all commercial transactions in these products.

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with the obligations arising out of the putting into force of the Convention on January 1st, 1930.

"Paris, December 20, 1929." [Signed] Nickl.

[11] "In thus affixing its signature, the Royal Italian Government undertakes to put the convention into force provided the conditions laid down in the present Protocol are fulfilled, as well as the condition specified in Article C of the Supplementary Agreement, namely, that eighteen States at least which have ratified the Convention should apply it effectively as from July 1st, 1930." [Signed] G. Manzoni.

[12] (Ad referendum) [Signed] N. Ito.

[13] "The undersigned, duly authorized by the Norwegian Government declares that the said Government undertakes to put the provisions of the Convention of November 8th, 1927, and of the Supplementary Agreement of July 11th, 1928, into force by administrative action on January 1st, 1930, pending the deposit of the formal ratification of the Convention.

"Paris, December 20, 1929." [Signed] Sigurd Bentzon.

Article 3.

The present Agreement, of which the French and English texts shall both be authentic, shall bear this day's date.

It may be signed subsequently until December 31st, 1928, on behalf of any Member of the League of Nations or of any non-Member State to which the Council of the League of Nations may have communicated a copy of the present Agreement for this purpose.

Article 4.

The present Agreement shall be ratified.

The instruments of ratification shall be deposited before July 1st, 1929, with the Secretary-General of the League of Nations, who shall immediately notify the receipt thereof to all the Members of the League of Nations and all the non-Member States on whose behalf the present Agreement and the Convention of November 8th, 1927, have been signed or adhered to.

Should the present Agreement not have been ratified by this date by some of the Members of the League of Nations and non-Member States on whose behalf it has been signed, the High Contracting Parties shall be invited by the Secretary-General of the League of Nations to consider the possibility of putting it into force. They undertake to participate in this consultation, which shall take place before September 1st, 1929.

If by September 1st, 1929, all the Members of the League of Nations and non-Member States on whose behalf the present Agreement has been signed have ratified it, or if, under the procedure laid down in the preceding paragraph, those on whose behalf it has been ratified decide to put it into force, the

present Agreement shall come into force on October 1st, 1929, and this fact shall be notified by the Secretary-General of the League of Nations to all the High Contracting Parties to the present Agreement and to the Convention of November 8th, 1927.

Article 5.

On and after January 1st, 1929, any Member of the League of Nations and any non-Member State referred to in Article 3 may accede to the present Agreement.

This accession shall be effected by a notification made to the Secretary-General of the League of Nations, to be deposited in the archives of the Secretariat.

The Secretary-General shall immediately notify such deposit to all who have signed or acceded to the present Agreement.

Article 6.

If, after the expiration of a period of two years from the date of the coming into force of the present Agreement, an application for a revision of Article 2 has been made to the Secretary-General of the League of Nations by at least one-third of the Members of the League of Nations and non-Member States to which the present Agreement applies, the others undertake to participate in any consultation which may be held for this purpose.

Any Member of the League of Nations and any non-Member State to which the present Agreement applies may, if such consultation results in a rejection of its application for a revision, or if it considers that it cannot accept the revised Article 2, resume its liberty of action as regards the provisions of this Article six months after the revision has been

refused, or as from the date of the coming into force of the revised Article 2, provided notice be given to the Secretary-General of the League of Nations.

If, as the result of denunciations in accordance with the preceding paragraph, one-third of the Members of the League of Nations and non-Member States which are bound by the present Agreement but have not denounced it demand a further consultation, all the High Contracting Parties undertake to participate therein.

Any denunciation made in conformity with the foregoing provisions shall be notified immediately by the Secretary-General of the League of Nations to all the other High Contracting Parties.

Article 7.

Without prejudice to the provisions of the preceding Article relating to denunciation, the present Agreement may be denounced on behalf of any Member of the League of Nations or any non-Member State after the expiration of a period of five years from the date on which it comes into force, such denunciation to take effect twelve months after the date on which it is notified to the Secretary-General of the League of Nations.

Such denunciation shall only take effect in so far as concerns the Member of the League of Nations or the non-Member State on whose behalf it has been made.

Any denunciation made in conformity with this procedure shall be notified immediately by the Secretary-General of the League of Nations to all the other High Contracting Parties.

If any High Contracting Party considers that any denunciation thus made has created a new situation, and makes to the Secretary-General of the League

of Nations a request to this effect, the latter shall convene a Conference in which the other High Contracting Parties undertake to participate. This Conference may, within a period to be fixed by itself, either terminate the obligations arising under the present Agreement or modify its provisions. If any Member of the League of Nations or non-Member State bound by the present Agreement is unable to agree to the modification introduced, the said Agreement may be denounced on its behalf, and it shall then be released from its obligations thereunder as from the date on which the denunciation which led to the convening of the Conference takes effect.

Article 8.

The provisions of Articles 4, 5, 7, 8, 9, 10, 11, 12 and 13 of the Convention of November 8th, 1927, and the provisions of the Protocol relating to these Articles, as well as of paragraph (*b*) of the Protocol to Article 1, shall apply to the present Agreement in so far as the obligations contained therein and the products covered by the Agreement allow. As regards the application of the procedure provided for in the above-mentioned Article 8, no distinction shall be made between the various provisions of the preceding Articles of the present Agreement.

IN FAITH WHEREOF the above-mentioned Plenipotentiaries have signed the present Agreement.

DONE at Geneva on the eleventh day of July, one thousand nine hundred and twenty-eight, in a single copy, which shall be deposited in the archives of the Secretariat of the League of Nations, and of which certified true copies shall be delivered to all Members of the League of Nations.

[Signatory countries: Austria; Belgium; Czecho-

slovakia; Great Britain, Northern Ireland, and all parts of the British Empire which are not separate members of the League of Nations (but not including any of his Britannic Majesty's colonies, protectorates, or territories under suzerainty or mandate); Bulgaria; Denmark; Finland; France; Germany; Hungary; Italy; Luxemburg; Netherlands; Norway; Poland; Roumania; Yugoslavia; Sweden; Switzerland; and Turkey.

Ratification: The conditions stipulated in *Article* 4 having been fulfilled, the agreement went into effect on October 1, 1929. The United States, it will be noted, is not a signatory.]

B. Protocol to the Agreement

At the moment of signing the International Agreement relating to the Exportation of Hides and Skins concluded this day, the undersigned, duly authorised, have agreed on the following provisions, which are intended to ensure the application of that Agreement.

The provisions of the Agreement relative to the Exportation of Hides and Skins of this day's date shall apply to prohibitions and restrictions on the exportation of the products mentioned in Article 1 of the said Agreement from the territories of any High Contracting Party to the territories of any other High Contracting Party.

Ad Article 1.

"Prepared hides and skins" shall, for the purposes of the present Agreement, mean hides and skins which have undergone some form of preparation for the sole purpose of ensuring their preservation.

Ad Article 2.

In consideration of the annexed declaration signed by the delegate of Roumania, the High Contracting Parties agree that that country shall provisionally not be bound by the provisions of Article 2 of the Agreement of this day's date.

Declaration by the Roumanian Delegation

[*Translation.*]

While reserving the right to maintain export duties on hides and skins, the Roumanian Government declares that it has no intention whatever of maintaining in respect of these commodities, by means of excessive export duties, the prohibition which has been abolished; it merely desires to retain full liberty with a view to arriving at a normal situation by the gradual reduction of export duties, a course which it has already pursued in the case of other raw materials.

(*Signed*) ANTONIADE.

IN FAITH WHEREOF the above-mentioned Plenipotentiaries have signed the present Protocol.

DONE at Geneva on the eleventh day of July, one thousand nine hundred and twenty-eight in a single copy, which shall be deposited in the archives of the Secretariat of the League of Nations, and of which authenticated copies shall be delivered to all Members of the League of Nations.

[Signed by the same countries which signed the Agreement.]

VI. INTERNATIONAL AGREEMENT RELATING TO THE EXPORTATION OF BONES, JULY 11, 1928

A. Text of Main Agreement

Article 1.

The High Contracting Parties undertake that, on and after October 1st, 1929, the export of raw or dried bones and waste thereof, horns and hoofs and waste thereof, and glue-stock hide shall not be subjected by them to any prohibition or restriction under whatever form or denomination.

Article 2.

The High Contracting Parties who at present impose no export duties on the products enumerated in Article 1, or whose export duties do not exceed the rate of 1.50 Swiss francs per hundred kilogrammes, undertake not to impose or maintain, after October 1st, 1929, any export duty on these products exceeding the rate of 1.50 Swiss francs.

Article 3.

The High Contracting Parties who at present impose on the products referred to in Article 1 any export duty in excess of 3 Swiss francs undertake to reduce it as from October 1st, 1929, to a figure not exceeding 3 Swiss francs.

Article 4.

The High Contracting Parties who at present impose on the products referred to in Article 1 export duties exceeding 1.50 but not exceeding 3 Swiss francs, but who do not impose prohibitions on these products, undertake not to increase the rates of duty at present in force.

Nevertheless, export duties not exceeding 3 Swiss

francs may be imposed by those High Contracting Parties who impose at present duties in excess of 1.50 but not exceeding 3 Swiss francs, provided that the duties are now imposed at the same time as prohibitions.

Article 5.

In regard to the products mentioned in Article 1, no tax, apart from a statistical duty, may be instituted or maintained which, by virtue of the respective legislations of the High Contracting Parties, is not applicable to all commercial transactions of which these products may be the subject.

Article 6.

The present Agreement in no way precludes the conclusion of special agreements between any of the High Contracting Parties based either on the limitation of export duties to rates lower than those authorised by the said Agreement or on the abolition of all export duties.

Such agreements shall not, however, affect the rights of third countries under treaties based on most-favoured-nation treatment.

Article 7.

The present Agreement, of which the French and English texts shall both be authentic, shall bear this day's date.

It may be signed subsequently until December 31st, 1928, on behalf of any Member of the League of Nations or of any non-Member State to which the Council of the League of Nations may have communicated a copy of the present Agreement for this purpose.

Article 8.

The present Agreement shall be ratified.

The instruments of ratification shall be deposited before July 1st, 1929, with the Secretary-General of the League of Nations, who shall immediately notify the receipt thereof to all the Members of the League of Nations and all the non-Member States on whose behalf the present Agreement and the Convention of November 8th, 1927, have been signed or adhered to.

Should the present Agreement not have been ratified by this date by some of the Members of the League of Nations and non-Member States on whose behalf it has been signed, the High Contracting Parties shall be invited by the Secretary-General of the League of Nations to consider the possibility of putting it into force. They undertake to participate in this consultation, which shall take place before September 1st, 1929.

If by September 1st, 1929, all the Members of the League of Nations and non-Member States on whose behalf the present Agreement has been signed have ratified it, or if, under the procedure laid down in the preceding paragraph, those on whose behalf it has been ratified decide to put it into force, the present Agreement shall come into force on October 1st, 1929, and this fact shall be notified by the Secretary-General of the League of Nations to all the High Contracting Parties to the present Agreement and to the Convention of November 8th, 1927.

Article 9.

On and after January 1st, 1929, any Member of the League of Nations and any non-Member State referred to in Article 7 may accede to the present Agreement.

This accession shall be effected by a notification made to the Secretary-General of the League of Nations, to be deposited in the archives of the Secretariat.

The Secretary-General shall immediately notify such deposit to all who have signed or acceded to the present Agreement.

Article 10.

If, after the expiration of a period of two years from the date of the coming into force of the present Agreement, an application for a revision of Articles 2, 3 and 4, has been made to the Secretary-General of the League of Nations by at least one-third of the Members of the League of Nations and non-Member States to which the present Agreement applies, the others undertake to participate in any consultation which may be held for this purpose.

Any Member of the League of Nations and any non-Member State to which the present Agreement applies may, if such consultation results in a rejection of this application for a revision, or if it considers that it cannot accept the revised Articles 2, 3 or 4, resume its liberty of action as regards the provisions of these Articles six months after the revision has been refused, or as from the date of the coming into force of the revised Articles 2, 3 or 4, provided notice be given to the Secretary-General of the League of Nations.

If, as the result of denunciations in accordance with the preceding paragraph, one-third of the Members of the League of Nations and non-Member States which are bound by the present Agreement but have not denounced it demand a further consultation, all the High Contracting Parties undertake to participate therein.

Any denunciation made in conformity with the foregoing provisions shall be notified immediately by the Secretary-General of the League of Nations to all the other High Contracting Parties.

Article 11.

Without prejudice to the provisions of the preceding Article relating to denunciation, the present Agreement may be denounced on behalf of any Member of the League of Nations or of any non-Member State after the expiration of a period of five years from the date on which it comes into force, such denunciation to take effect twelve months after the date on which it is notified to the Secretary-General of the League of Nations.

Such denunciation shall only take effect in so far as concerns the Member of the League of Nations or the non-Member State on whose behalf it has been made.

Any denunciation made in conformity with this procedure shall be notified immediately by the Secretary-General of the League of Nations to all the other High Contracting Parties.

If any High Contracting Party considers that any denunciation thus made has created a new situation, and makes to the Secretary-General of the League of Nations a request to this effect, the latter shall convene a Conference in which the other High Contracting Parties undertake to participate. This Conference may, within a period to be fixed by itself, either terminate the obligations arising under the present Agreement or modify its provisions. If any Member of the League of Nations or any non-Member State bound by the present Agreement is unable to agree to the modifications introduced, the

said Agreement may be denounced on its behalf, and it shall then be released from its obligations thereunder as from the date on which the denunciation which led to the convening of the Conference takes effect.

Article 12.

The provisions of Articles 4, 5, 7, 8, 9, 10, 11, 12 and 13 of the Convention of November 8th, 1927, and the provisions of the Protocol relating to these Articles, as well as of paragraph (*b*) of the Protocol to Article 1, shall apply to the present Agreement in so far as the obligations contained therein and the products covered by it allow. As regards the application of the procedure provided for in the above-mentioned Article 8, no distinction shall be made between the various provisions of the preceding Articles of the present Agreement.

IN FAITH WHEREOF the above-mentioned Plenipotentiaries have signed the present Agreement.

DONE at Geneva the eleventh day of July, one thousand nine hundred and twenty-eight, in a single copy, which shall be deposited in the archives of the Secretariat of the League of Nations, and of which certified true copies shall be delivered to all Members of the League of Nations.

[Signatory countries: Germany; Austria; Belgium; Great Britain and Northern Ireland and all parts of the British Empire which are not separate Members of the League of Nations; Bulgaria; Denmark; Finland; France; Hungary; Italy; Luxemburg; Norway; Netherlands; Poland; Roumania; Kingdom of the Serbs, Croats and Slovenes; Sweden; Switzerland; Czechoslovakia; Turkey.

Ratification: The conditions stipulated in *Article* 8 having been fulfilled, the agreement went into effect on October 1, 1929. The United States, it will be noted, is not a signatory.]

B. Protocol to the Agreement

At the moment of signing the International Agreement relating to the Exportation of Bones, concluded this day, the undersigned, duly authorised, have agreed on the following provisions, which are intended to ensure the application of that Agreement:

The provisions of the Agreement relative to the Exportation of Bones of this day's date shall apply to prohibitions and restrictions on the exportation of the products mentioned in Article 1 of the said Agreement from the territories of any High Contracting Party to the territories of any other High Contracting Party.

SECTION I.

Ad Article 1.

(*a*) The provisions of Article 1 shall apply to Italy only in so far as concerns glue-stock hide.

As regards the other goods mentioned in the said Article, the High Contracting Parties, recognising that Italy, by reason of conventions concluded with certain countries, is unable to increase her export duty of two paper lire, agree that she may maintain the prohibition at present in force, so long as the stipulation concerning the said rate of export duty also remains in force.

(*b*) "Bone waste" includes parings of bone (commonly known as "dentelles") used in the manufacture of buttons and similar articles.

SECTION II.

Ad Article 2.

As regards the application of Article 2, the High Contracting Parties, recognising the special situation of Austria, Hungary, and Czechoslovakia, authorise these countries, notwithstanding the provisions of the said Article 2, to impose an export duty which may exceed the rate of 1.50 Swiss francs, provided for in that Article, but which must not in any case exceed 3 Swiss francs.

SECTION III.

Ad Article 3.

In consideration of the annexed declarations signed by the delegates of Poland, Roumania and the Kingdom of the Serbs, Croats and Slovenes, the High Contracting Parties agree that these countries shall be provisionally released from all obligations as regards export duties on the products referred to in Article 1 of the Agreement of this day's date.

[*Translation.*]

A. Declaration by the Polish Delegation.

The Polish Government having, under the terms of Section III of the Protocol, *ad* Article 3 above, been accorded the right to maintain or levy, without any limitation as to rates, an export duty on the products referred to in Article 1 of the Agreement of this day's date, willingly gives an assurance that it will not increase the rates at present in force and will make every effort to reduce these rates progressively in the future.

François Dolezal.

[*Translation.*]

B. Declaration by the Roumanian Delegation.

While reserving the right to maintain export duties on raw and dried bones and waste thereof, the Roumanian Government declares that it has no intention whatever of maintaining in respect of these commodities, by means of excessive export duties, the prohibition which has been abolished; it merely desires to retain full liberty with a view to arriving at a normal situation by the gradual reduction of export duties, a course which it has already pursued in the case of other raw materials.

ANTONIADE.

[*Translation.*]

C. Declaration by the Delegation of the Kingdom of the Serbs, Croats and Slovenes.

The Serb-Croat-Slovene Government having, under the terms of Section III of the Protocol, *ad* Article 3 above, been accorded the right to maintain or levy, without any limitation as to rates, an export duty on the products referred to in Article 1 of the Agreement of this day's date, willingly gives an assurance that it will not exceed the rate of 4 Swiss francs and will make every effort to reduce this rate progressively in the future.

CONST. FOTITCH.

SECTION IV.

Ad Articles 2, 3 *and* 4.

The High Contracting Parties agree that glue-stock hide shall not be assimilated to the products referred to in Articles 2, 3 and 4 and that, except in the case of the countries referred to in Section III of the present Protocol, no export duty shall be

levied on glue-stock hide. They agree, however, that Hungary may levy on this product an export duty which shall not in any case exceed two-thirds of the duties applicable to the products referred to in Article 1 of the Agreement of this day's date.

IN FAITH WHEREOF the Plenipotentiaries have signed the present Protocol.

DONE at Geneva on the eleventh day of July, one thousand nine hundred and twenty-eight, in a single copy, which shall be deposited in the archives of the Secretariat of the League of Nations, and of which certified true copies shall be delivered to all Members of the League of Nations.

[Signed by the same countries which signed the Agreement.]

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